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THE SOCIETY FOR THE PROMOTION OF HELLENIC STUDIES

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RULES

OF THE

Society for the Promotion of Hellenic Studies.

1. THE objects of this Society shall be as follows:—

I. To advance the study of Greek language, literature, and art, and to illustrate the history of the Greek race in the ancient, Byzantine, and Neo-Hellenic periods, by the publication of memoirs and unedited documents or monuments in a Journal to be issued periodically.

II. To collect drawings, facsimiles, transcripts, plans, and photographs of Greek inscriptions, MSS., works of art, ancient sites and remains, and with this view to invite travellers to communicate to the Society notes or sketches of archæological and topographical interest.

III. To organise means by which members of the Society may have increased facilities for visiting ancient sites and pursuing archæological researches in countries which, at any time, have been the sites of Hellenic civilization.

2. The Society shall consist of a President, Vice-Presidents, a Council, a Treasurer, one or more Secretaries, and Ordinary Members. All officers of the Society shall be chosen from among its Members, and shall be *ex officio* members of the Council.

3. The President shall preside at all General, Ordinary, or Special Meetings of the Society, and of the Council or of any Committee at which he is present. In case of the absence of the President, one of the Vice-Presidents shall preside in his stead, and in the absence of the Vice-Presidents the Treasurer. In the absence of the Treasurer the Council or Committee shall appoint one of their Members to preside.

4. The funds and other property of the Society shall be administered and applied by the Council in such manner as they shall consider most conducive to the objects of the Society: in the Council shall also be vested the control of all publications issued by the Society, and the general management of all its affairs and concerns. The number of the Council shall not exceed fifty.

5. The Treasurer shall receive, on account of the Society, all subscriptions, donations, or other moneys accruing to the funds thereof, and shall make all payments ordered by the Council. All cheques shall be signed by the Treasurer and countersigned by the Secretary.

6. In the absence of the Treasurer the Council may direct that cheques may be signed by two members of Council and countersigned by the Secretary.

7. The Council shall meet as often as they may deem necessary for the despatch of business.

8. Due notice of every such Meeting shall be sent to each Member of the Council, by a summons signed by the Secretary.

9. Three Members of the Council, provided not more than one of the three present be a permanent officer of the Society, shall be a quorum.

10. All questions before the Council shall be determined by a majority of votes. The Chairman to have a casting vote.

11. The Council shall prepare an Annual Report, to be submitted to the Annual Meeting of the Society.

12. The Secretary shall give notice in writing to each Member of the Council of the ordinary days of meeting of the Council, and shall have authority to summon a Special and Extraordinary Meeting of the Council on a requisition signed by at least four Members of the Council.

13. Two Auditors, not being Members of the Council, shall be elected by the Society in each year.

14. A General Meeting of the Society shall be held in London in June of each year, when the Reports of the Council and of the Auditors shall be read, the Council, Officers, and Auditors for the ensuing year elected, and any other business recommended by the Council discussed

and determined. Meetings of the Society for the reading of papers may be held at such times as the Council may fix, due notice being given to Members.

15. The President, Vice-Presidents, Treasurer, Secretaries, and Council shall be elected by the Members of the Society at the Annual Meeting.

16. The President and Vice-Presidents shall be appointed for one year, after which they shall be eligible for re-election at the Annual Meeting.

17. One-third of the Council shall retire every year, but the Members so retiring shall be eligible for re-election at the Annual Meeting.

18. The Treasurer and Secretaries shall hold their offices during the pleasure of the Council.

19. The elections of the Officers, Council, and Auditors, at the Annual Meeting, shall be by a majority of the votes of those present. The Chairman of the Meeting shall have a casting vote. The mode in which the vote shall be taken shall be determined by the President and Council.

20. Every Member of the Society shall be summoned to the Annual Meeting by notice issued at least one month before it is held.

21. All motions made at the Annual Meeting shall be in writing and shall be signed by the mover and seconder. No motion shall be submitted, unless notice of it has been given to the Secretary at least three weeks before the Annual Meeting.

22. Upon any vacancy in the Presidency occurring between the Annual Elections, one of the Vice-Presidents shall be elected by the Council to officiate as President until the next Annual Meeting.

23. All vacancies among the other Officers of the Society occurring between the same dates shall in like manner be provisionally filled up by the Council until the next Annual Meeting.

24. The names of all candidates wishing to become Members of the Society shall be submitted to a Meeting of the Council, and at their next Meeting the Council shall proceed to the election of candidates so proposed: no such election to be valid unless the candidate receives the votes of the majority of those present.

25. The Annual Subscription of Members shall be one guinea, payable and due on the 1st of January each year ; this annual subscription may be compounded for by a single payment of £15 15s., entitling compounders to be Members of the Society for life, without further payment. All Members elected on or after January 1, 1905, shall pay on election an entrance fee of two guineas.

26. The payment of the Annual Subscription, or of the Life Composition, entitles each Member to receive a copy of the ordinary publications of the Society.

27. When any Member of the Society shall be six months in arrear of his Annual Subscription, the Secretary or Treasurer shall remind him of the arrears due, and in case of non-payment thereof within six months after date of such notice, such defaulting Member shall cease to be a Member of the Society, unless the Council make an order to the contrary.

28. Members intending to leave the Society must send a formal notice of resignation to the Secretary on or before January 1 ; otherwise they will be held liable for the subscription for the current year.

29. If at any time there may appear cause for the expulsion of a Member of the Society, a Special Meeting of the Council shall be held to consider the case, and if at such Meeting at least two-thirds of the Members present shall concur in a resolution for the expulsion of such Member of the Society, the President shall submit the same for confirmation at a General Meeting of the Society specially summoned for this purpose, and if the decision of the Council be confirmed by a majority at the General Meeting, notice shall be given to that effect to the Member in question, who shall thereupon cease to be a Member of the Society.

30. The Council shall have power to nominate British or Foreign Honorary Members. The number of British Honorary Members shall not exceed ten.

31. Ladies shall be eligible as Ordinary Members of the Society, and when elected shall be entitled to the same privileges as other Ordinary Members.

32. No change shall be made in the Rules of the Society unless at east a fortnight before the Annual Meeting specific notice be given to every Member of the Society of the changes proposed.

RULES FOR THE USE OF THE LIBRARY

AT 22 ALBEMARLE STREET.

I. THAT the Library be administered by the Library Committee, which shall be composed of not less than four members, two of whom shall form a quorum.

II. That the custody and arrangement of the Library be in the hands of the Hon. Librarian and Librarian, subject to the control of the Committee, and in accordance with Regulations drawn up by the said Committee and approved by the Council.

III. That all books, periodicals, plans, photographs, &c., be received by the Hon. Librarian, Librarian or Secretary and reported to the Council at their next meeting.

IV. That every book or periodical sent to the Society be at once stamped with the Society's name.

V. That all the Society's books be entered in a Catalogue to be kept by the Librarian, and that in this Catalogue such books, &c., as are not to be lent out be specified.

VI. That, except on Christmas Day, Good Friday, and on Bank Holidays, the Library be accessible to Members on all week days from eleven A.M. to six P.M. (Saturdays, 11 A.M. to 2 P.M.), when either the Librarian, or in his absence some responsible person, shall be in attendance. Until further notice, however, the Library shall be closed for the vacation from July 20 to August 31 (inclusive),

VII. That the Society's books (with exceptions hereinafter to be specified) be lent to Members under the following conditions:—

(1) That the number of volumes lent at any one time to each Member shall not exceed three.

(2) That the time during which such book or books may be kept shall not exceed one month.

(3) That no books be sent beyond the limits of the United Kingdom.

VIII. That the manner in which books are lent shall be as follows:—

(1) That all requests for the loan of books be addressed to the Librarian.

(2) That the Librarian shall record all such requests, and lend out the books in the order of application.

(3) That in each case the name of the book and of the borrower be inscribed, with the date, in a special register to be kept by the Librarian.

(4) Should a book not be returned within the period specified, the Librarian may reclaim it.

All expenses of carriage to and fro shall be borne by the borrower.

- (6) All books are due for return to the Library before the summer vacation.

IX. That no book falling under the following categories be lent out under any circumstances :—

- (1) Unbound books.
- (2) Detached plates, plans, photographs, and the like.
- (3) Books considered too valuable for transmission.
- (4) New books within one month of their coming into the Library.

X. That new books may be borrowed for one week only, if they have been more than one month and less than three months in the Library.

XI. That in the case of a book being kept beyond the stated time the borrower be liable to a fine of one shilling for each week after application has been made by the Librarian for its return, and if a book is lost the borrower be bound to replace it.

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Applications for books and letters relating to the Photographic Collections, and Lantern Slides, should be addressed to the *Librarian* (Mr. J. ff. Baker-Penoyre), at 22 Albemarle Street, W.

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 Transactions of the Cambridge Philological Society and Journal of Philology.
 Wochenschrift für Klassische Philologie (Dr. Maas, *Möhlstrasse, 19, München, Germany*).

SESSION 1904-1905.

The First General Meeting of the Society was held on November 1st, when Dr. Arthur Evans gave an account of the last season's work at Knossos, the Provost of Oriel being in the chair.

Dr. Evans said that on the palace site itself this year's excavations had thrown much new light on the stratigraphy of the successive "Minoan" constructions dating from the close of the Neolithic period onwards. In the west wing of the later palace the original plan could now be clearly distinguished from the existing scheme, which was shown to be the result of subsequent remodelling. Fresh stone repositories belonging to its first period—like those found in 1903 containing the faience figures and snake goddess, but less rich in relics—were found to extend north of the others beneath the later stepped portico which here descends to the central court. A whole line of earlier gypsum walling facing this court could finally be made out, a little within the later wall. This original façade was seen to have been partly incorporated in the later constructions, and partly to have been broken through by them. The west wall of the palace itself and the adjoining magazines belonged to the original work, but the entrances to the magazines were found to have been altered. Originally they were provided with comparatively narrow doors appropriate to the valuable contents of the cists along their floors. Later, the entrances were widened, the cists reduced to mere shallow cavities, and the whole fitted out for the reception of huge oil jars. From the superficial deposit of some of these cists belonging to the second period of the later palace were brought out a variety of painted stucco fragments which had fallen here from a N.W. hall above. Among these were illustrations of the bull ring, together with other frescoes, slightly larger than the "miniature" paintings found in 1900, showing part of the façade of another shrine, with the "fetish" double-axes stuck into its columns. Dr. Evans also exhibited a scheme devised by him for the arrangement of the scattered fragments of the earlier-discovered miniature frescoes as part of connected designs. Two panels were thus reproduced by M. Gilliéron under his direction, one showing a small temple and halls on either side,

with ladies seated or standing in the foreground and throngs of men behind. The other depicted walled enclosures with trees and similar spectators overlooking a court where gaily-dressed women were engaged in a mazy dance. Fresh interesting fragments had also been detected of the painted reliefs exhibiting parts of a male figure, with a *fleur-de-lis* crown, and these permitted the restoration of the entire figure of what was not improbably one of the priest-kings of Knossos. The centre of the crown was found to be adorned with peacocks' plumes. A clay sealing of still earlier date supplied what appeared to be an actual portrait of a Minoan dynast associated with his son, but in this case the head was crownless. A section cut beneath the pavement of the west court had laid bare remarkably complete evidence as to the stratification and comparative chronology of the characteristic stages of Minoan culture that preceded the construction of the later palace. The foundation of the later palace was shown to have been posterior to the great "Middle Minoan" age of polychrome pottery. Its second period, as appeared from Egyptian associations, did not come down later than about 1500 B.C., but there were now traceable six distinct periods of culture that separated the initial stage of the later palace from the latest Neolithic deposit. Below this again the Neolithic stratum, which was itself superposed on the virgin rock, attained a depth of from six to eight metres. On the western borders of the palace the total depth of the human deposit was from twelve to fourteen metres. A Minoan paved way was opened out leading directly west from the "theatral area" discovered last year. Near this, towards the close of the present excavations, had come to light what appeared to be remains of the Royal arsenal. A large hoard of clay documents was found here relating to chariots and arms, and near one of these—enumerating a lot of over 800 arrows—lay the remains of two officially-sealed chests containing the bronze-headed arrows themselves. A principal work of the year was the exploration of an extensive cemetery dating from the last days of the palace and the immediately succeeding period. Over a hundred tombs were opened, containing bronze vessels, arms, jewellery, and other typically "Mycenæan" remains. Of still greater interest was the discovery of what appears to have been a Royal mausoleum occupying a commanding point overlooking land and sea. It was built on a different plan from those of Mycenæan Greece, the principal chamber being square with a keeled roof. Most of the metal objects had been abstracted in ancient times, but magnificent vases in the later palace style were found, together with Egyptian alabastra of the beginning of the XVIIIth Dynasty.

Plans of the mausoleum by Mr. Theodore Fyfe were exhibited.

The Second General Meeting, at which Mr. S. H. Butcher took the chair, was held on February 21st, when Mr. W. W. Tarn read a paper on the limits of the Greek Warship problem, which appears in this volume.

The paper, which was listened to with great attention, evoked a remarkably good discussion. Among the speakers were Mr. W. C. F. Anderson, Mr. H. Awdry, Professor Ernest Gardner, Mr. G. F. Hill, Mr. H. Stannus, and Mr. H. H. Statham.

The Third General Meeting was held on May 9th. At this meeting Professor Percy Gardner read a paper on the Apoxyomenos and Lysippos, Professor C. Waldstein taking the chair. The main contention of Professor Gardner's paper was that the well-known Apoxyomenos of the Vatican cannot, in the light of recent discoveries, especially that of the Agias statue at Delphi, be regarded as a trustworthy indication of the style of Lysippos. In the discussion which followed, Dr. Waldstein and Professor Ernest Gardner took part. Arrangements have been made for other papers dealing with the Masters of the fourth century during the next session, so that we may expect further light on the problems discussed by Professor Gardner in this valuable paper.

The Annual General Meeting was held at Burlington House, on June 27th, the President, Sir Richard Jebb, M.P., occupying the chair.

The Hon. Secretary (Mr. George Macmillan) read the following report on behalf of the Council :—

The Session for 1904-5 has been distinguished by two noteworthy events, one intimately connected with the history of the Society and one forming a landmark in the general progress of archaeological research.

Of the meeting held on July 5th, 1904, to celebrate the twenty-fifth anniversary of the foundation of the Society, a full account has already appeared. In the last volume of the JOURNAL are verbatim reports of the President's retrospective address, and of the speeches delivered by the distinguished visitors who were present for the occasion. It only remains for the Council, on behalf of the Society, once more to emphasise the pleasure it gave to them to learn from the addresses of the American delegates, from the series of telegrams from the leading foreign archaeologists, and from the expressions of goodwill offered by the former Minister for Greece in London, the cordial estimation in which our Society is held by the Greek community, by our *confrères* on the Continent, and by our kinsmen in America.

The Council next desires to tender to H.R.H. the Crown Prince of Greece, President of the recent Archaeological Congress at Athens, to Dr. P. Kavvadias, Ephor-General of Antiquities in Greece and long an honorary member of our Society, and to the Greek nation at large, their sincere felicitations on the success of that important international gathering. The President and Hon. Secretary were chosen as the Society's Delegates to the Congress, but Sir Richard Jebb was unavoidably prevented by his Parliamentary duties from attending. Mr. Macmillan

ound on reaching Athens that an Address of congratulation was being presented by most of the Delegates and he accordingly, in consultation with other members of Council who were members of the Congress, drew up such an Address in the name of the Society and presented it at the opening meeting. The following members of Council, besides reading papers, took an active part in the Congress as Presidents or Vice-Presidents of Sections: Dr. Arthur Evans, Prof. Percy Gardner, Mr. Cecil Smith, and Professor Waldstein. Papers were read also by Mr. Louis Dyer and Miss Harrison.

In addition to the Commemorative gathering of July, the Society has held its usual quarterly meetings for the reading of papers and discussion. In November, Dr. Arthur Evans laid before us the results of his excavations at Knossos during the previous season, describing in particular the Mausoleum of Minoan times then discovered. In February, Mr. W. W. Tarn read a paper, which led to an interesting discussion, on the Greek Warship, and in May, Professor Percy Gardner read a paper on the Apoxyomenos in its relation to Lysippus in the light of the more recently discovered Agias of Delphi.

In accordance with a vote of the Council, an Address, written on behalf of the Society by Sir Richard Jebb, has been sent to Professor Adolf Michaelis, Director of the Institute of Art and Archaeology at Strassburg, on the occasion of the celebrations attending his seventieth birthday, which fell on June 22. It was felt that this compliment was especially due from English archaeologists to the author of *Ancient Marbles in Great Britain*, and one of the original honorary members of this Society. By the death, mentioned in last year's report, of Professor Ulrich Köhler, Professor of Ancient History in the University of Berlin, and at the time of the Society's foundation Director of the German Archaeological Institute at Athens, the Society has lost one of its original honorary members. As this year has been signalised by the Archaeological Congress at Athens the Council propose to invite H.R.H. the Crown Prince of Greece, as President of the Archaeological Society of Athens, to do the Society the honour of accepting the vacant place in the list of honorary members. It was also recently decided in recognition of his long services to the Society to create the honorary Secretary, Mr. George Macmillan, a life member *honoris causa*.

The Council has again granted the sum of £100 to the Cretan Exploration Fund, and Mr. Arthur Evans has pursued with his usual vigour and success his investigations on the site of Knossos. Though his work this season was unfortunately hampered by lack of adequate funds he has further elucidated the plan of the Queen's apartments in the Palace by the discovery of additional portions of the colonnaded staircase. He has also, in following up the line of the ancient Minoan roadway on the west side of the Palace, come on an important building which was evidently

its objective. It remains to be seen whether funds will be forthcoming to explore the building thoroughly.

The usual grants have been made of £100 to the British School at Athens and £25 to the School at Rome, and in connection with the latter it may be mentioned that the Council recently authorised the President and Honorary Secretary to sign in the name of the Society a memorial to the Treasury in favour of a grant of £500 a year to the School from public funds. The sum of £25 has been granted to Professor W. M. Ramsay for research in Asia Minor, and £10 to Mr. Hogarth for exploration in Cyrene.

The Library.

In last year's Report the attention of members was drawn to the increasing difficulty, owing to the limited accommodation at Albemarle Street, of keeping the Society's Library on a plan readily intelligible to students and visitors. That difficulty the Council has been able, in a measure, to obviate by the acquisition of a small adjoining room, with the result that the subject order of the books remains undisturbed, and the accommodation for students is somewhat improved. Another small improvement is that the system of classifying and binding the forty volumes of archaeological tracts from the Library of the late Dr. Overbeck has been extended to the hitherto scattered pamphlets and smaller monographs. A subject catalogue of all the pamphlets will shortly be ready for use in the Library.

The records show that 375 visits were paid to the Library in the course of the year, as against 338 for the year 1903-4, and 250 for the year 1902-3. In addition to the books consulted in the Library 401 volumes were borrowed, the figures for the preceding years being 312 and 211. The Librarian believes that many members are still unaware that they are at liberty to order and receive books by post.

97 books (122 volumes) have been added to the Library. Among accessions of special interest are:—

The completion of the *Corpus Inscriptionum Atticarum*; Collignon (M.) and Couve (L.), *Catalogue des Vases peints du Musée National d'Athènes*; Burlington Fine Arts Club, *Exhibition of Ancient Greek Art*; Rayet (O.), *Monuments de l'Art Antique*; Wood (R.), *The Ruins of Palmyra and Baalbec*, and the supplementary volume to Stuart (J.) and Revett (N.), *Antiquities of Athens*.

The thanks of the Society are due to the Delegates of the University Presses at Oxford, Cambridge, and Chicago, and the Trustees of the British Museum, for gifts of books to the Library. The following authors have presented copies of their works:—Mr. F. S. Benson, Rev. H. Browne,

Mr. S. H. Butcher, M. P. Foucart, Professor Percy Gardner, Dr. A. van Millingen, Mr. J. G. Milne, Signor P. Orsi, Herr E. Petersen, and Mr. Hermann Smith. Miscellaneous gifts of books have been received from Mr. J. M. Edmonds, Mr. F. W. Hasluck, Mr. G. F. Hill, and the Librarian. The following publishers have presented books :—Messrs. Barth, Frowde, Hachette, Laurens, Leroux, Longman, Macmillan, Murray, Seeman, Unwin, and Weidmann.

The Collection of Negatives, Slides, and Photographs.

The complete catalogue of lantern slides promised in the Council's report of last year appeared in the second part of the JOURNAL for 1904. As was then explained, the 1,700 slides, now catalogued for the first time on a single scientific system, serve also as an index of the Society's far larger resources in the collection of negatives. Photographic prints of these are kept to facilitate the choice of members wishing to purchase or hire slides or photographs.

Miscellaneous additions, catalogued on the same system as in the original catalogue, will in future be found in the last part of each volume of the JOURNAL, and it is further hoped to add substantial sections from time to time, notably a section on epigraphy and one embracing a more comprehensive treatment of the lesser arts. Through the kindness of members of the *Argonaut* cruise, further important additions in the topographical series are expected. Copies of the original catalogue and of the special lists of slides for elementary lectures may still be had.

In the course of the year 787 slides and 366 photographs were sold to members, and the large number of 3,053 slides were lent on hire, more than double the number lent last year. It is satisfactory to be able to note that the considerable expense of reorganising and improving this department, and of replacing where necessary a large number of negatives removed from the collections, has already been nearly recovered by the use members make of the materials collected and arranged for them.

The Council desire to take this opportunity of thanking Mr. J. L. Myres, who retired from the office of Hon. Keeper of the Photographic Collections in the course of the year, for his great services to this department of the Society's work.

Finance.

Turning to the always important subject of the Society's finances, it will be within the recollection of members that at the last Annual Meeting it was decided, having regard to the increased advantages now offered to members and to the consequent increase of expenditure, to raise the Entrance Fee from one to two guineas. The new arrangement did not take effect till the beginning of the current year, and it is perhaps too early

to form an opinion on the effect this change will have on the Society's financial position. It is, however, quite safe to say that private members can do the Society no better service than by making its aim and claim known in suitable quarters. If the efforts made in this direction by a few of our members were shared by the general body, the Society's numbers and efficiency might be very largely increased.

The financial position of the Society has necessarily occupied the attention of the Council more than usual during the past session. The statement recently circulated to members showed that the outlay on administration and on the primary objects of the Society, such as the JOURNAL and the Library, now works out at about 18s. 6d. a year for each member, leaving therefore a very small margin for grants or for any unforeseen expenditure. The question of raising the annual subscription was considered, but put aside as inexpedient. It was then proposed, and provisionally decided by the Council to recommend, that the Fee for Life Composition should be raised from fifteen to twenty guineas. On more mature consideration, however, the Council have decided not to make this recommendation, at any rate for the present. All the more important is it that their recent proposal for an *Endowment Fund*, to which members might contribute either by donation or bequest, should receive liberal support. It should perhaps be explained that the object of this proposal was not to increase the number of Life Compositions, but to offer to Life Members and Annual Subscribers alike an opportunity of helping the Society at a critical period. A few long-standing subscribers have answered the appeal by compounding. Having regard to their previously paid annual subscriptions the Council have gratefully accepted their action, but wish to make it quite clear that their intention in issuing the Endowment Fund Appeal was to solicit donations or bequests from the general body of members. If every member felt able to make a small donation of a guinea or upwards, a sufficient sum would be raised to enable the Society to cover its outstanding liabilities, which as the accounts will shew are just now exceptionally heavy, and to leave a substantial nucleus which might be increased from time to time by further donations or bequests. The Council earnestly commend this suggestion to all members, and trust that the response may be both prompt and general. So far, though the appeal was issued in April, not more than ten members have responded, beyond the few already mentioned who have sent in Life Compositions.

It was stated in last year's Report that the Society's accounts would in future be presented in a different form, which would show more clearly its actual financial position. The accounts now submitted are the fulfilment of this promise. It will be seen that separate accounts are given of each department of the Society's work, including such special undertakings as the publications of the Aristophanes Facsimile and the volume on Phylakopi. Taking these accounts in order, the two numbers of the JOURNAL which have been paid for during the year cost, including distribu-

tion, £618, while the receipts from sales and advertisements amount to £140, showing a net cost of £478. The cost of reprinting Volume XXIII., amounting to £121, has also been met during the year. The outstanding account against the Phylakopi volume has been reduced from £296 to £244 by the sale of 52 copies. In spite however of special efforts made to push the sale, only two copies of the Aristophanes Facsimile have been sold during the year, which is a very disappointing result. The American Archaeological Institute has made a further payment during the year to cover its share of the cost of production.

The Lantern Slides account shows a slight loss of £5 on the year's working, but this department may be regarded as being on a self-supporting basis. The outlay on the Library has amounted to £101, a considerable excess over the annual grant of £75 made by the Council. This is in a measure due to arrears of binding, but it is evident that economy must be exercised in this as in some other departments. The grants made during the year, as recorded earlier in this Report, amount to £260. Unless a considerable improvement takes place in the Society's financial position, it may be necessary to reduce for a few years the amount spent on exploration and excavation.

Turning now to the Account of Income and Expenditure, it will be seen that an actual loss of £260 is shown on the year's working, and this in spite of the fact that, owing to the unusual increase in the number of members, the entrance fees have brought in no less than £133. The total receipts from ordinary revenue amount to £1,168. The expenditure, including grants, Library, and the balance on the JOURNAL (including £121 for the reprint of Vol. XXII.), amounts to £1,450. The salaries amount now to £165. The rent also is increased, and will in future amount to £100 per annum. The charge for stationery, postage, sundry printing and other miscellaneous expenses amounts to £140. The cost of printing and distributing the History of the Society and the Proceedings at last year's Anniversary Meeting, amounting to £33, will not recur. Life Subscriptions to the amount of £94 have been received during the year, but although it has been necessary to spend this sum it does not properly belong to revenue. It is intended in future to bring into the Revenue account the Composition Fees of Life Members who have died during the year, and the item £47 5s. in respect of three such members comes into the present account.

The Balance Sheet gives what is believed to be a true statement of the Society's financial position. On the one side are shown actual debts payable (including all outstanding liabilities to the end of the financial year), amounting to £394. A certain proportion (£535) of the subscriptions received for 1905 is carried forward as a liability to meet the expenses of the seven months from June 1—the end of the financial year—to January 1, when the new subscriptions come in. The item £1,699 for Life Compositions represents the sum actually received from Life Members

who still survive. It is open to question whether this sum is strictly speaking a liability, for under no probable circumstances could its repayment be claimed. Nevertheless, it certainly carries an obligation to supply the JOURNAL to these members during their lifetime, or so long as the Society continues. On the other side of the account stand the cash in hand, £200, debts receivable, £131, the present value of the investments, £1,263, the estimated value of the stock of publications and of the Library, £1,065. In forecasting the revenue up to December 31, something may be allowed for arrears of subscriptions (the amount actually due is £149), and for entrance fees and subscriptions which may come in from new members, but as these items are uncertain they cannot appear in the accounts until they are actually received. From May 31, when the accounts were made up, £23 has come in from arrears, and £20 from new members.

Conclusion.

Among members lost by death during the year, special mention should be made of the Bishop of Southwell, Dr. Thomas Fowler, President of Corpus College, Oxford, Admiral Sir Erasmus Ommaney, the Rev. Augustus Austen-Leigh, Provost of King's College, Cambridge, Canon Adam Farrar of Durham, and Mr. F. D. Mocatta, long a generous supporter of this as of many other learned Societies.

During the year, 118 new members have been elected, while 30 have been lost by death or resignation. The number of members at present on the list is 926, and there are in addition 162 subscribing Libraries and 40 honorary members.

It seems clear from this Report that as regards both the efficiency and the scope of its work, the session 1904-5 shews a marked improvement in the Society's position. The serious state of its finances has been dwelt upon at some length, and constitutes a strong argument for increasing its numbers and raising further funds. With such additional support, both the thoroughness and the scale of its efforts might be extended to the better fulfilment of the Society's aim, the advancement of Hellenic study.

In moving the adoption of the Report the President said—As the aim of our Society is to promote Hellenic studies in the most comprehensive sense, our Annual Meeting is an occasion on which it is natural to consider what has been achieved in the field of these studies during the past twelve months, though the survey must necessarily be very brief and incomplete. With regard to the past year, it may perhaps be said that the Congress at Athens has been the most signal incident. Of that I shall not attempt to speak: it has been very fully recorded, and would, indeed, claim large discourse. For similar reasons, I shall not speak of Crete; the Society may hope to hear about that from Mr. Arthur Evans himself. But it may

be useful to give a few brief notes about the work, mostly of a less conspicuous kind, which has been going on in various parts of the Greek lands. At Oropus the Greeks have resumed excavations on the site of the Amphiareion, where various buildings have been discovered, including lodgings for visitors to the shrine. At Sunium the town wall and other buildings have been cleared. At Epidaurus a new stoa of considerable length has been discovered. An interesting account of the altar of Zeus on Mount Lycacus has now been published in the *Ephemeris Archaeologike*. The altar was a mound of ashes of great size, which stood on the very summit of the mountain. In its neighbourhood were found some bases of later date and other remains of building, as well as some votive figures. Passing from the mainland of Greece to the islands, we may note the excavations conducted for the Belgian government at Carthaea on the south-east coast of Ceos. Carthaea, it may be remembered, was the town where Simonides, a native of Iulis in the same island, held in his youth the post of chorodidascalus in the local choregeion, before he was invited by the Peisistratidae, about 527 B.C., to perform similar functions at Athens. The Belgian exploration has resulted in determining the position of the principal buildings at Carthaea, including a prytaneion. About sixty inscriptions have also been found, the more important of which relate to the reigns of the first two Ptolemies. At Delos, the French school continued their excavations in the early autumn of 1904. Much of the *débris* which had encumbered the site was cleared away. The new discoveries included the site of a hieron of Dionysus, and some archaic statues of Apollo. Some early pottery was also found, a noteworthy fact, since at Delos old ceramic work had hitherto been conspicuous by its absence. Another interesting discovery was a sculptor's shop in the agora, as well as some other houses, so that now it is possible to form some idea of the aspect of a street in Delos. Several inscriptions of the Hellenistic period were also brought to light. The little island of Ios, best known in antiquity as the legendary place of Homer's death and burial, has also been visited by the Belgian archaeologists who have found there a temple and other remains. Much interest has attached to the German excavations in Cos, on the site of the Asclepieion, which are not yet quite complete, but have been provisionally published in the *Archaeologische Anzeiger* for 1905, part I. Dr. Herzog has found three terraces, the highest of which was occupied by the temple and its porticoes; on the lowest there was a sacred agora. Further light has been thrown on the internal arrangements of the great temple of Asclepius. A later building of the Hellenistic period has also been found, with the bases of the statues which were ranged around one of its rooms. A large number of inscriptions has been obtained, about a hundred in all. One of these is a decree, of the fifth century B.C., declaring it unlawful to cut down cypress-trees in the sacred precinct. Among those of a later period, one dates from a time soon after the abortive attack of the Gauls on Delphi in 279 B.C., and alludes to the *epiphaneia* of Apollo to

protect his sanctuary. Another, of about 200 B.C., refers to a newly-instituted festival of Artemis under the title of Hyacinthotrophos. Another preserves the beginning of a letter from King Antiochus to the people of Cos, recommending to them his physician Apollonophanes. In Rhodes, the Danish excavations at Lindos have yielded some inscriptions of considerable historical value, especially for the history of art. Among these is a list of the eponymous priests of Athena Lindia from 170 B.C. The nature of the buildings on the acropolis of Lindos has also been elucidated.

While good work has thus been proceeding among the islands, much has also been done at various points on the western coasts of Asia Minor. At Pergamon, progress has been made in clearing the youths' Gymnasium, and the interesting Hellenistic house to which the Hermes of Alcamenes probably belonged. At Ephesus the further researches on the site of the temple, conducted on behalf of the British Museum by Mr. Hogarth, have yielded some valuable results. The Austrians also have continued their work on that site. The reliefs which they found last year at the library have been put together at Vienna, and prove to represent the Emperors Marcus Aurelius, Lucius Verus, and Commodus. At Smyrna the Aphrodision has been explored, with the result of discovering reliefs of the Hellenistic and Roman periods. But perhaps no excavations during the past year are of greater importance than those which the Germans have been conducting at Miletus. I am indebted to Professor Ernest Gardner for an opportunity of reading the latest report on this work, recently drawn up by Dr. Theodor Wiegand. Here it must suffice briefly to notice one or two of the principal results. A remarkable sanctuary of Apollo Delphinios has been investigated. The sacred precinct consisted of a large rectangular enclosure, surrounded by porticoes. But no temple stood on the ground thus enclosed. The central object was a colossal tripod-stand. East of this there was a deep circular basin of marble, about two metres in diameter. West of it were the remains of two crescent-shaped exedrae, facing each other. West of these again was a large rectangular altar of archaic character, with a smaller round altar, also archaic, close to it at the middle of its east side. This round altar was to Hecate. In the south-west corner were three round altars, of date not later than the fifth century B.C.; one of these was for Zeus Soter, another for Artemis; the third bears no inscription. Stone tablets, about $2\frac{1}{2}$ metres high, let into the walls of the porticoes surrounding the temenos, give lists of the eponymous officials of Miletus, the *aesumnetae* who were entitled *stephanephori*. Two of the lists, which are consecutive, give the series without a break from the year 523 B.C. down to 260 B.C. A third list belongs to the middle of the second century B.C. Three others, which again are consecutive, comprise the period from about 89 B.C. to A.D. 20. In all, we have the eponymi for 434 years. These records afford, it seems, some scanty, but still valuable data for the constitutional history of Miletus. Some famous

names occur here and there, such as those of "Alexander, son of Philip," and "King Mithridates." As Dr. Wiegand observes, these lists will be of especial value as aids to the chronology of other documents connected with Miletus.

In the province of Greek literature and palaeography, the past year has produced no event of signal importance. But it may be well to mention a work which, though it appeared in the spring of 1904, was not, I think, noticed at our last annual meeting, when the history of our Society during the last five and twenty years naturally had the foremost claim on attention. I refer to the commentary of Didymus on Demosthenes, edited from a papyrus by an honorary member of this Society, Professor Diels of Berlin, in conjunction with Dr. Schubart. A notable feature of it is the series of long citations from Philochorus, whose work seems to have served in some sort as an annual register. The Oxyrhynchus fragment of Pindar, published in June, 1904, may also be included in this survey. It has the interest of confirming the remark of Dionysius, that the style of Pindar's partheneia was simpler and easier than that which is found in his odes or fragments of other classes.

Since our last annual meeting, the Society has lost several members, some of them distinguished in various walks of life, and all sympathetic friends of the studies which our Society seeks to promote. The names thus removed from our roll are those of the late Dr. Ridding, Bishop of Southwell; Admiral Sir E. K. Ommanney; the Rev. Dr. Thomas Fowler, President of Corpus Christi College, Oxford; the Rev. Augustus Austen Leigh, Provost of King's College, Cambridge; the Rev. Dr. A. S. Farrar, Canon of Durham; Mr. F. D. Mocatta; and Miss E. C. Stevenson.

The adoption of the Report, having been seconded by Dr. D. Bikelas, was carried unanimously.

The former President and Vice-Presidents were re-elected, and Mr. M. N. Tod was elected to a vacant place on the Council.

After a vote of thanks to the Auditors of the Society's accounts, Messrs. A. J. Butler and George L. Craik, proposed by Dr. Arbuthnot Nairn and seconded by Mr. H. H. Statham, the proceedings terminated.

A comparison with the receipts and expenditure of the last ten years is furnished by the following tables:—

ANALYSIS OF ANNUAL RECEIPTS FOR THE YEARS ENDING :—

| | 31 May, 1896. | 31 May, 1897. | 31 May, 1898. | 31 May, 1899. | 31 May, 1900. | 31 May, 1901. | 31 May, 1902. | 31 May, 1903. | 31 May, 1904. | 31 May, 1905. |
|---|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| | £ | £ | £ | £ | £ | £ | £ | £ | £ | £ |
| Subscriptions. Current | 645 | 617 | 613 | 598 | 634 | 636 | 628 | 646 | 672 | 709 |
| Arrears | 9 | 4 | 13 | 18 | 9 | 10 | 13 | 13 | 205 | 76 |
| Life Compositions | 63 | 15 | ... | 32 | 63 | 78 | 78 | 94 | 126 | 94 |
| Libraries | 117 | 126 | 118 | 122 | 163 | 179 | 185 | 202 | 147 | 154 |
| Entrance Fees | ... | ... | ... | ... | 33 | 45 | 52 | 50 | 100 | 133 |
| Dividends | 43 | 43 | 43 | 43 | 43 | 42 | 42 | 42 | 42 | 49 |
| Endowment Fund | ... | ... | ... | ... | ... | ... | ... | ... | ... | 30 |
| "Excavations at Phylakopi," sales | ... | ... | ... | ... | ... | ... | ... | ... | ... | 52 |
| "Facsimile Codex Venetus," sales (less expenses) | ... | ... | ... | ... | ... | ... | ... | ... | ... | 93 |
| | 877 | 805 | 787 | 813 | 945 | 990 | 998 | 1,047 | 1,292 | 1,390 |

ANALYSIS OF ANNUAL EXPENDITURE FOR THE YEARS ENDING :—

| | 31 May, 1896. | 31 May, 1897. | 31 May, 1898. | 31 May, 1899. | 31 May, 1900. | 31 May, 1901. | 31 May, 1902. | 31 May, 1903. | 31 May, 1904. | 31 May, 1905. |
|--|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| | £ | £ | £ | £ | £ | £ | £ | £ | £ | £ |
| Rent | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 88 |
| Insurance | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 16 | 18 |
| Salaries | 47 | 52 | 50 | 60 | 60 | 60 | 60 | 69 | 89 | 165 |
| Library | 39 | 94 | 93 | 61 | 73 | 74 | 82 | 89 | 50 | 100 |
| Cost of Catalogue | ... | ... | ... | ... | ... | ... | ... | ... | 55 | ... |
| Sundry Printing, Postage, and Stationery, etc. | 46 | 29 | 45 | 32 | 58 | 61 | 41 | 72 | 137 | 147 |
| Printing and Postage, History of Society | ... | ... | ... | ... | ... | ... | ... | ... | ... | 24 |
| Printing and Postage, Pro- ceedings at Anniversary | ... | ... | ... | ... | ... | ... | ... | ... | ... | 10 |
| Lantern Slides Account | ... | ... | 24 | ... | 13 | 29 | 17 | 35 | } 2 | 5* |
| Photographs Account | ... | ... | ... | 26 | 1 | 15 | ... | ... | | |
| Cost of Journal (less sales) | 394 | 346 | 516 | 536 | 390 | 382 | 367 | 454 | 511 | 511 |
| Cost of Journal, Reprint of Vol. XXIII. | ... | ... | ... | ... | ... | ... | ... | ... | ... | 122 |
| Grants | 100 | 180 | 125 | 150 | 200 | 200 | 200 | 250 | 225 | 260 |
| Facsimile of the Codex Venetus of Aristophanes | ... | ... | ... | ... | ... | ... | ... | 210 | 30 | ... |
| "Excavations at Phylakopi" | ... | ... | ... | ... | ... | ... | ... | 156 | 140 | ... |
| Commission and Postage per Bank | ... | ... | ... | ... | ... | ... | 3 | 2 | ... | ... |
| Egypt Exploration Fund—1,100 copies of Mr. Hogarth's Report | 23 | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| | 744 | 796 | 948 | 960 | 890 | 916 | 865 | 1,432 | 1,335 | 1,450 |

* Expenses (less sales).

DR. "JOURNAL OF HELLENIC STUDIES" ACCOUNT. FROM JUNE 1, 1904, TO MAY 31, 1905. CR.

| | £ | s. | d. | £ | s. | d. |
|---|-----|----|----|------|----|----------|
| To Printing and Paper. Vol. XXIV., Part II., and XXV., Part I. | 358 | 13 | 9 | | | |
| " Plates | 39 | 12 | 9 | | | |
| " Drawing and Engraving | 77 | 6 | 11 | | | |
| " Editing and Sundry Contributors | 66 | 19 | 0 | | | |
| " Packing, Addressing, and Carriage to Members .. | 72 | 11 | 8 | | | |
| " Sundries | 3 | 0 | 10 | | | |
| | | | | 618 | 4 | 11 |
| " Reprint of 100 Copies of Vol. XXIII. | | | | 121 | 12 | 2 |
| " 18 Copies of Vol. XXII. purchased from Members | | | | 9 | 9 | 0 |
| " Part Editor's fee omitted from last year's account .. | | | | 25 | 0 | 0 |
| | | | | £774 | 6 | 1 |
| By Sales, including back Vols., from June 1, 1904, to May 31, 1905. | | | | | | |
| Per Macmillan & Co., Ltd. | 94 | 1 | 0 | | | |
| " Hellenic Society | 32 | 5 | 2 | | | |
| | | | | | | 126 6 2 |
| " Receipts for Advertisements | | | | | | 14 4 6 |
| Balance to Income and Expenditure Account | | | | | | 633 15 5 |
| | | | | | | £774 6 1 |

iii

"EXCAVATIONS AT PHYLAKOPI" ACCOUNT. FROM JUNE 1, 1904, TO MAY 31, 1905.

| | Column showing Financial Result from Date of Publication to May 31, 1905. | Account for Current Year. |
|--|---|---------------------------|
| Deficit Balance brought forward (excluding value of Stock) | £ 296 8 3 | £ s. d. — |
| Balance on Current Year to Income and Expenditure Account | — | 52 6 0 |
| | £296 8 3 | £52 6 0 |
| Sale of 52 Copies during year | £ 244 2 3 | £ s. d. 52 6 0 |
| Deficit Balance from Publication to May 31, 1905 | £296 8 3 | £52 6 0 |

| | Column showing Financial Result from Date of Publication to May 31, 1905. | Account for Current Year. | Column showing Financial Result from Date of Publication to May 31, 1905. | Account for Current Year. |
|--|--|---------------------------------|--|---------------------------------|
| To Deficit Balance brought forward at June 1, 1904 (excluding Value of Stock)..... | £ s. d. 222 12 11 | £ s. d. 4 18 8 | By Balance of Half Cost due, received from American Archaeological Institute | £ s. d. 88 16 8 |
| „ Cost of Printing Prospectus, &c. | 4 18 8 | 4 18 8 | „ Sale of Two Copies during Year | 12 12 0 |
| „ Half Share of Surplus from Current Year's Sale less Expenses, due to American Archaeological Institute | 3 16 8 | 3 16 8 | Hellenic Society's Deficit Balance from Publication to May 31, 1905 (excluding Value of Stock) | 129 19 7 |
| Balance to Income and Expenditure Account..... | 92 13 4 | | | |
| | £231 8 3 | £101 8 8 | | £231 8 3 £101 8 8 |

LANTERN SLIDES AND PHOTOGRAPHS ACCOUNT. FROM JUNE 1, 1904, TO MAY 31, 1905.

| | | | |
|--|---------------------|---|--------------------|
| To Slides and Photographs for Sale..... | £ s. d. 29 13 5½ | By Receipts from Sales .. | £ s. d. 44 6 8½ |
| „ Slides for Hire | 16 9 5½ | „ „ Hire | 18 1 11 |
| „ Photographs for Reference Collection | 11 4 11 | „ „ Sale of Catalogues | 0 10 6 |
| „ Replacing Negatives .. | 2 4 6 | „ Balance to Income and Expenditure Account | 5 0 8½ |
| „ Printing Catalogue | 8 7 6 | | |
| | £67 19 10 | | £67 19 10 |

LIBRARY ACCOUNT. FROM JUNE 1, 1904, TO MAY 31, 1905.

| | | | |
|--------------------|--------------------|---|------------------|
| To Purchases | £ s. d. 72 11 1 | By Received for Sales of Duplicates..... | £ s. d. 1 0 6 |
| „ Binding | 29 2 1 | „ „ „ Catalogues | 0 10 6 |
| | 101 13 2 | „ „ „ Fines..... | 0 6 0 |
| | | Balance to Income and Expenditure Account | 1 17 0 |
| | £101 13 2 | | 99 16 2 |
| | | | £101 13 2 |

INCOME AND EXPENDITURE ACCOUNT. From June 1, 1904, to May 31, 1905.

| <i>Expenditure.</i> | | | <i>Income.</i> | | |
|--|-----|--------------|--|------|--------------|
| | £ | s. d. | | £ | s. d. |
| To Rent | | 88 11 8 | By Members' Subscriptions— | | |
| „ Salaries— | | | Proportion brought forward from last year... | 389 | 11 4 |
| Librarian and Secretary | 133 | 6 8 | Received during current year—Arrears..... | 76 | 13 0 |
| Assistant Treasurer | 15 | 0 0 | „ „ „ —Current | | |
| Office Boy, &c. | 16 | 14 6 | (Subs. for 1905) | £766 | 11 0 |
| „ Insurance..... | | 165 1 2 | Less $\frac{1}{2}$ carried forward to | | |
| „ Miscellaneous Expenses | | 17 14 6 | next year | 447 | 3 1 |
| „ Stationery | | 21 16 7 | Overpaid—Differences in Exchange | 319 | 7 11 |
| „ Postage..... | | 17 8 8 | | 2 | 6 |
| „ Sundry Printing, Rules, List of Members, | | 51 0 3 | „ Members' Entrance Fees | 785 | 14 9 |
| Notices, &c. | | | „ Libraries Subscriptions— | 133 | 7 0 |
| „ Printing and Postage, History of Society | | 56 15 5 | Proportion brought forward from last year... | 82 | 1 6 |
| „ „ „ Proceedings at Anniversary | | 23 9 9 | Received for 1904..... | 8 | 18 6 |
| „ Grants— | | 10 5 8 | „ „ 1905..... | £150 | 2 7 |
| Cretan Exploration Fund | 100 | 0 0 | Less $\frac{1}{2}$ carried forward to | | |
| British School at Athens..... | 100 | 0 0 | next year | 87 | 11 9 |
| „ „ Rome | 25 | 0 0 | | 62 | 10 10 |
| Asia Minor Exploration | 35 | 0 0 | | 153 | 10 10 |
| „ Balance from Lantern Slides and Photos Account | | 260 0 0 | „ Life Compositions brought into Revenue Account | | |
| „ „ Journal of Hellenic Studies | | 5 0 8½ | for 3 Life Members deceased | 47 | 5 0 |
| „ „ Library Account .. | | 633 15 5 | Dividends on Investments | 48 | 18 6 |
| „ „ „ .. | | 99 16 2 | Balance from "Excavations at Phylakopi" Account | 52 | 6 0 |
| „ „ „ .. | | | „ „ "Facsimile Codex Venetus" Account | 92 | 13 4 |
| „ Depreciation of Stocks, by Sales, &c..... | | 1450 15 11½ | Balance (carried to Balance Sheet) | 260 | 4 6½ |
| | | 123 4 0 | | | |
| | | £1573 19 11½ | | | £1573 19 11½ |

THIRD LIST OF
BOOKS AND PAMPHLETS
ADDED TO THE
LIBRARY OF THE SOCIETY
SINCE THE PUBLICATION OF THE CATALOGUE.
1904—1905.

- Aldenhoven (F.)** Itinéraire descriptif de l'Attique et du Péloponnèse. 8vo. Athens. 1841.
- Athens.** Catalogue des Vases peints du Musée National d'Athènes. By M. Collignon and L. Couve. 2 vols. Text and Plates. 8vo. and 4to. Paris. 1902-4.
- Auteroche (C. d')** A Journey into Siberia. 4to. 1770.
- Barker (W. B.)** Lares and Penates, or Cilicia and its Governors. 8vo. 1853.
- Beaufort (F.)** Karamania, or a brief description of the South Coast of Asia Minor. 8vo. 1818.
- Benson (F. S.)** Ancient Greek Coins III. Parts XI.—XIV. Sicily. 1903-4.
- Berlin, Royal Museums.** Beschreibung der geschnittenen Steine im Antiquarium. By A. Furtwaengler. 4to. Berlin. 1896.
- Blaquiere (E.)** The Greek Revolution ; its origin and progress. 8vo. London. 1824.
- Breton (E.)** Athènes . . . suivie d'un voyage dans le Péloponnèse. 8vo. Paris. 1862.
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Department of Coins and Medals.

Cyprus. By G. F. Hill. 1904.

Department of Greek and Roman Antiquities.

Catalogue of the Terracottas. By H. B. Walters.

8vo. 1903.

Catalogue of Sculpture. Vol. III. By A. H. Smith.

8vo. 1904.

- Browne (H.) Handbook of Homeric Study. 8vo. 1905.
 Burlington Fine Arts Club. Exhibition of Ancient Greek Art.
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- Burnet (J.) Early Greek Philosophy. 8vo. 1892.
- Burrow (E. I.) The Elgin marbles. 8vo. 1837.
- Butcher (S. H.) Some aspects of the Greek genius. 8vo. 1904.
 ——— Harvard Lectures on Greek subjects. 8vo. 1904.
- Carlisle, The Earl of. Diary in Turkish and Greek Waters.
 8vo. 1855.
- Chandler (R.) Travels in Asia Minor. 4to. Oxford. 1775.
- Chishull (E.) Antiquitates Asiaticae. Fol. 1728.
- Clapp (E. B.) Hiatus in Greek Melic Poetry. [Univ. Californ.
 Public. Class. Phil. I, 1.]
 8vo. Berkeley, U.S.A. 1904.
- Clark (W. G.) Peloponnesus; notes of study and travel.
 8vo. 1858.
- Collignon (M.) Lysippe. 8vo. Paris.
 ——— Catalogue des Vases peints. See Athens.
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- Crace (J. D.) Plaster Decoration. [J.R.I.B.A. XI. 10.]
 4to. 1904.
- Crum (W. E.) The Osireion at Abydos. See Murray (M.A.).
- Currelly (C. T.) Ehnasya. See Petrie.
- Curzon (R.) Visits to Monasteries in the Levant. 8vo. 1849.
 ——— Armenia. 8vo. 1854.
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- Deissmann (G. A.) Bible Studies. Translated by A. Grieve.
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- Detlefsen (D.) *Editor.* See Plinius (C.) Secundus.
- Disney (J.) Museum Disneianum: a description of a collection . . .
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- Falkener (E.) A Description of some important Theatres and other
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- Fellows (C.) A Journal written during an excursion in Asia Minor.
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- Foucart (P.)** Le culte de Dionysos en Attique. (Mémoires de l'Acad. des Inscript. XXXVII.) 4to. Paris. 1904.
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- Gardner (E. A.)** Introduction to Greek Epigraphy. See Roberts.
- Gardner (P.)** A Grammar of Greek Art. 8vo. 1905.
- Gell (W.)** Geography and Antiquities of Ithaca. 4to. 1807.
- Gifford (E. H.)** *Editor.* See Plato.
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 ——— Notes on Roman gold bars from Egypt. [Proc. S.A.L. 2 S. XX. 90.] 8vo. 1904.
- Homolle (Th.)** Fouilles de Delphes. Tome V (2). Plates only. 4to. Paris. 1905.
- Inscriptiones Graecae.** Orientis Graeci inscriptiones Selectae. Ed. W. Dittenberger. Vol. II. 8vo. Leipsic. 1905.
- Irvine (W.)** Letters on Sicily. 8vo. 1813.
- Jebb (R. C.)** Bacchylides. [Proceedings of Brit. Acad. Vol. I.] 8vo. 1905.
- La Borde (A. de.)** Voyage pittoresque et historique de l'Espagne. Fol. Paris. 1813.
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- Leroy.** Ruins of Athens, with Remains and other valuable Antiquities in Greece. 1759.
- Lucas (P.)** Voyage du Sieur Paul Lucas . . . dans la Grèce, l'Asie Mineure, la Macédoine, et l'Afrique. 2 vols. 8vo. Paris. 1714.
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- McClymont (J. A.)** The New Testament and its writers. 8vo. 1893.
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- Markham (A. H.)** Budrum Castle. [Trans. of the Quatuor Coronati Lodge.] 8vo. 1904.
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- Ormonde (Marquis of)** An Autumn in Sicily. 4to. Dublin. 1850.
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- Pindar.** The Olympian and Pythian Odes. Ed. B. L. Gildersleeve. 8vo. 1893.
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8vo. Boston and Chicago. 1905.
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- Wood (R.)** The ruins of Palmyra and Balbec. Fol. 1827.

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 6333 „ „ „ „ knobbed *pithos*. („ „ 12, „ 3.)
 3825 Frescoes. Cnossus, Fragments illustrating the dress of women.
 3819 „ „ Headless tribute bearers.
 7360 Modelling, etc. A snake goddess, 2 views. (*B.S.A.* ix. fig. 54.)
 7361 „ „ A votary, 2 views. (*B.S.A.* ix. fig. 56.)
 3520 Gold cup with rosettes. (Schliemann, *Mycenae*, fig. 344.)
 1042 Design of the ceiling at Orchomenos. (Collignon, fig. 9.)
 7359 Faience flying fish from Cnossus. (*B.S.A.* ix. fig. 46.)
 7363 Faience wild goat in relief, Cnossus. (*B.S.A.* ix. pl. 3.)
 3885 Clay tablets with linear script from the original.
 7099 Fragment of libation table, Palaikastro, with Minoan inscription.

Vases of Geometric Period.

- 3797 'Dipylon' vase from Thebes. A warship. (*J.H.S.* xix. pl. 8.)

Vases of the Orientalising Period.

- 363 Attica. Early Attic(?) the Gorgons, Athena and Perseus. (*Arch. Zeit.* 1882, pl. 9.
 3550 „ „ „ „ „ „ „ „ „ 10.

SCULPTURE.

* denotes that the photograph is taken direct from the original or from an adequate photographic reproduction.

† denotes that the photograph is from a cast.

Where, for any reason, the photograph is from a drawing or engraving the fact is noted in the text.

EARLY RELIEFS.

- 6221 Angelona (Laconia), Bearded worshipper before altar.*
- 6326 Athens, head of a discobolos.* (Ath. Nat. Mus.)
- 6337 Selinus, head of dying giant from metope of temple of Hera.*
- 7532 Sparta, funerary relief of seated figures.* (Cf. *Cat. of Sparta Museum*, No. 32.)

SCULPTURE FROM OLYMPIA.

- 6325 Metope. Heracles and Stympalian Birds. Figure of Athena.* Louvre.
- 6312 W. Pediment. Torso of a Lapith woman.*
- 6315 Nike of Paonius,* profile.

PRAXITELEAN.

- 6314 Hermes of Praxiteles, another view of the head.*
- 6311 „ „ foot of the statue.*
- 1347 Cnidian Aphrodite. The Berlin head,* full face.
- 3792 Apollo Sauroktonos.* Vatican.
- 7399 Hermes Belvedere,* head of the.
- 7395 Aphrodite of Arles.*
- 6323 Apollino.* Florence.

MISCELLANEOUS.

- 6313 Selinus. Metope from later temple. Actæon and Artemis.*
- 6328 Atalanta from Tegea, head.* (*B.C.H.* 1901, pl. 4.)
- 6329 „ „ „ torso.* (*B.C.H.* 1901, pl. 6.)
- 6330 „ „ „ head and torso photographed together on the same scale.
- 5445 The Mausoleum, reconstruction of the order. (*B.M. Cat. of Sculpt.* ii. pl. 15.)
- 5439 Nike of Samothrace and galley, outline drawing. (Rayet, *Monuments*.)
- 4279 The Lansdowne Heracles.*
- 7529 Votive relief to Asclepius.* (*Cat. of Sparta Mus.* No. 29.)
- 7396 'Dying Gladiator,* Back view of.
- 7397 „ „ * Head of.
- 6318 The Attalid dedications. Two fallen warriors.
- 7398 Aphrodite of Melos,* Head of.
- 5997 Heracles from Cythera,* Farnese type. (Svoronos, *Ath. Nat. Mus.* pl. 11. 1.)
- 6316 Psyche.* Naples.
- 6324 Young Satyr asleep* (the 'Barberini Faun').
- 5996 Head of crouching boy from Cythera.* (Svoronos, *Ath. Nat. Mus.* pl. 12. 1a.)
- 5499 Unknown Hellenistic portrait from Delphi.* (*Delphes*, iv. pl. 73.)
- 6092 Orestes and Electra† with ephebus† by Stephanus. (Cf. *J.H.S.* xxiv. p. 132, fig. 2.)
- 7396 Group of wrestlers.* Florence.
- 6093 Aeschylus.* Florence. (*J.H.S.* xxiv. pl. 2a.)

BRONZES.

- 7231 Statuettes. Three male figures of very early type.* Ath. Nat. Mus.
- 6327 Apollo Piombino.*
- 7237a, b Statuettes. Nude male and draped female figures of fine style.* Ath. Nat. Mus.
- 7243b Taras on Dolphin.* Ath. Nat. Mus.

- 6338 The 'Idolino.'* Louvre.
 6322 The 'Praying Boy'* of Berlin.
 5995 Draped female figure from Cythera.* (Svoronos, *Ath. Nat. Mus.* pl. 6.)
 6317 The Chimaera.* Florence.
 7366 Heads of Hermes of Cythera and Hermes of Praxiteles compared.
 7367 " " unhelmeted head from Tegea compared.
 7368 " " Hagias of Lysippus compared.
 5993 Portrait head from Cythera,* 2 views. (Svoronos, *Ath. Nat. Mus.* pl. 3.)
 5994 Restoration of whole figure of above. (*Id.* pl. 4.)

TERRACOTTAS.

- 7369 Diadumenos of Polycleitus.†
 5132 Three heads from Cyprus.*

COINS.

- 5998 Argos, Æ. (B.M. Cat. *Peloponnesus*, pl. 28, 19.)
 7400 Elis, Æ. 5th century head of Olympian Zeus. (Cf. B.M. Cat. *Peloponnesus*, pl. 12, 10.)
 3549 Ptolemy Soter, Æ. coins of the regency for Alexander IV. (Cf. B.M. Cat. *Ptolemies*, pl. 1.)

MISCELLANEA.

(a) General.

- 5472 Lead halteres. B.M. (*J.H.S.* xxiv. p. 182, fig. 2.)
 7247 Painted lacunar of Nereid Monument. B.M.
 1082 Mantinea theatre ticket. (*Journ. Internat. d'archéol. num.* iii. pl. 10, 1, 1a.)
 7184 Olympia, temple of Zeus, restoration of interior.

(b) Illustration to the Greek Warship problem. (See *J.H.S.* xxv. pp. 137-156.)

- 5458 Assyrian warship. B.M. (Dar. et Sagl. fig. 5263.)
 3797 Dipylon vase, a warship. (*J.H.S.* xix. pl. 8.)
 3454 Relief,* a warship. Acrop. Mus.
 5439 Nike of Samothrace and galley, outline drawing. (Rayet, *Monuments.*)
 5440 Detail of relief of Paris and Oenone. Palazzo Spada.
 3796 Pompeian wall painting. Roman sea fight. (Baumeister, fig. 1697.)
 5459 Relief, prow of a Roman galley. (Dar. et Sagl. fig. 5278.)
 3795 Relief, Trajan's column. Warships. (Baumeister, fig. 1685.)
 5438 Drawing of relief with galley Dal Pozzo album. B.M.
 3798 Woodcut, 3 Venetian galleys. Jacopo de' Barbari. B.M.
 3799 Venetian woodcut, Rowers in galley. B.M.

INSCRIPTIONS.

Prefatory Notice.—In pursuance of a promise in the original catalogue a series of some fifty slides is in preparation suitable for an introductory course on Greek Epigraphy. In a subject difficult of classification it has been found best to limit this series at the outset to one mainly illustrative of the study of the forms of the Greek alphabets, their differences and developments. Care, however, is being taken to include among the illustrations a fair proportion of inscriptions of well known historical interest. The arrangement followed will be approximately that adopted in E. S. Roberts' *Introduction to Greek Epigraphy*, but the illustrations where possible will be taken from originals or facsimiles. It is hoped that this series will be available next session.

NOTICE TO CONTRIBUTORS.

THE Council of the Hellenic Society having decided that it is desirable for a common system of transliteration of Greek words to be adopted in the *Journal of Hellenic Studies*, the following scheme has been drawn up by the Acting Editorial Committee in conjunction with the Consultative Editorial Committee, and has received the approval of the Council.

In consideration of the literary traditions of English scholarship, the scheme is of the nature of a compromise, and in most cases considerable latitude of usage is to be allowed.

(1) All Greek proper names should be transliterated into the Latin alphabet according to the practice of educated Romans of the Augustan age. Thus κ should be represented by *c*, the vowels and diphthongs *υ*, *αι*, *οι*, *ου* by *y*, *ae*, *oe*, and *u* respectively, final *-ος* and *-ου* by *-us* and *-um*, and *-πος* by *-er*.

But in the case of the diphthong *ει*, it is felt that *ei* is more suitable than *e* or *i*, although in names like *Laodicea*, *Alexandria*, where they are consecrated by usage, *e* or *i* should be preserved also words ending in *-ειον* must be represented by *-eum*.

A certain amount of discretion must be allowed in using the *o* terminations, especially where the Latin usage itself varies or prefers the *o* form, as *Delos*. Similarly Latin usage should be followed as far as possible in *-e* and *-a* terminations, e.g., *Priene*, *Smyrna*. In some of the more obscure names ending in *-πος*, as *Λέαγρος*, *-er* should be avoided, as likely to lead to confusion. The Greek form *-ον* is to be preferred to *-o* for names like *Dion*, *Hieron*, except in a name so common as *Apollo*, where it would be pedantic.

Names which have acquired a definite English form, such as *Corinth*, *Athens*, should of course not be otherwise represented. It is hardly necessary to point out that forms like *Hercules*, *Mercury*, *Minerva*, should not be used for *Heracles*, *Hermes*, and *Athena*.

(2) Although names of the gods should be transliterated in the same way as other proper names, names of personifications and epithets such as *Nike*, *Homonoia*, *Hyakinthios*, should fall under § 4.

(3) In no case should accents, especially the circumflex, be written over vowels to show quantity.

(4) In the case of Greek words other than proper names, used as names of personifications or technical terms, the Greek form should be transliterated letter for letter, *k* being used for *κ*, *ch* for *χ*, but *y* and *u* being substituted for *υ* and *ου*, which are misleading in English, e.g., *Nike*, *apoxyomenos*, *diadumenos*, *rhyton*.

This rule should not be rigidly enforced in the case of Greek words in common English use, such as *aegis*, *symposium*. It is also necessary to preserve the use of *ou* for *ου* in a certain number of words in which it has become almost universal, such as *boule*, *gerousia*.

(5) The Acting Editorial Committee are authorised to correct all MSS. and proofs in accordance with this scheme, except in the case of a special protest from a contributor. All contributors, therefore, who object on principle to the system approved by the Council, are requested to inform the Editors of the fact when forwarding contributions to the Journal.

In addition to the above system of transliteration, contributors to the *Journal of Hellenic Studies* are requested, so far as possible, to adhere to the following conventions :—

Quotations from Ancient and Modern Authorities.

Names of authors should not be underlined; titles of books, articles, periodicals, or other collective publications should be underlined (for italics). If the title of an article is quoted as well as the publication in which it is contained, the latter should be bracketed. Thus :

Six, *Jahrb.* xviii. 1903, p. 34,

or—

Six, *Protopogenes* (*Jahrb.* xviii. 1903), p. 34.

But as a rule the shorter form of citation is to be preferred.

The number of the edition, when necessary, should be indicated by a small figure above the line ; e.g. *Dittenb. Syll.*² 123.

Titles of Periodical and Collective Publications.

The following abbreviations are suggested, as already in more or less general use. In other cases, no abbreviation which is not readily identified should be employed.

- A.-E.M.* = Archäologisch-epigraphische Mittheilungen.
Ann. d. I. = Annali dell' Istituto.
Arch. Anz. = Archäologischer Anzeiger (Beiblatt zum Jahrbuch).
Arch. Zeit. = Archäologische Zeitung.
Ath. Mitth. = Mittheilungen des Deutschen Arch. Inst., Athenische Abtheilung.
Baumeister = Baumeister, Denkmäler des klassischen Altertums.
B.C.H. = Bulletin de Correspondance Hellénique.
Berl. Vas. = Furtwängler, Beschreibung der Vasensammlung zu Berlin.
B.M. Bronzes = British Museum Catalogue of Bronzes.
B.M.C. = British Museum Catalogue of Greek Coins.
B.M. Inscr. = Greek Inscriptions in the British Museum.
B.M. Vases = British Museum Catalogue of Vases, 1893, etc.
B.S.A. = Annual of the British School at Athens.
Bull. d. I. = Bullettino dell' Istituto.
Busolt = Busolt, Griechische Geschichte.
C.I.G. = Corpus Inscriptionum Graecarum.
C.I.L. = Corpus Inscriptionum Latinarum.
Cl. Rev. = Classical Review.
C.R. Acad. Inscr. = Comptes Rendus de l'Académie des Inscriptions.
Dar.-Sagl. = Darenberg-Saglio, Dictionnaire des Antiquités.
Dittenb. *O.G.I.* = Dittenberger, Orientis Graeci Inscriptiones Selectae.
Dittenb. *Syll.* = Dittenberger, Sylloge Inscriptionum Graecarum.
'Εφ. 'Αρχ. = 'Εφημερίς 'Αρχαιολογική.
G.D.I. = Collitz, Sammlung der Griechischen Dialekt-Inscripfen.
Gerh. *A.V.* = Gerhard, Ausserlesene Vasenbilder.
G.G.A. = Göttingische Gelehrte Anzeigen.
Head, *H.N.* = Head, Historia Numorum.
I.G. = Inscriptiones Graecae.¹
I.G.A. = Röhl, Inscriptiones Graecae antiquissimae.
Jahrb. = Jahrbuch des Deutschen Archäologischen Instituts.
Jahresh. = Jahreshefte des Oesterreichischen Archäologischen Institutes.
J.H.S. = Journal of Hellenic Studies.
Le Bas-Wadd. = Le Bas-Waddington, Voyage Archéologique.
Michel = Michel, Recueil d'Inscriptions grecques.
Mon. d. I. = Monumenti dell' Istituto.
Müller-Wies. = Müller-Wieseler, Denkmäler der alten Kunst.
Mus. Marbles = Collection of Ancient Marbles in the British Museum.
Neue Jahrb. kl. Alt. = Neue Jahrbücher für das klassische Altertum.
Neue Jahrb. Phil. = Neue Jahrbücher für Philologie.

¹ The attention of contributors is called to the fact that the titles of the volumes of the second issue of the Corpus of Greek Inscriptions, published by the Prussian Academy, have now been changed, as follows:—

- | | |
|-------------|---|
| <i>I.G.</i> | I. = Inscr. Atticae anno Euclidis vetustiores. |
| „ | II. = „ „ aetatis quae est inter Eucl. ann. et Augusti tempora. |
| „ | III. = „ „ aetatis Romanae. |
| „ | IV. = „ Argolidis. |
| „ | VII. = „ Megaridis et Boeotiae. |
| „ | IX. = „ Graeciae Septentrionalis. |
| „ | XII. = „ insul. Maris Aegaei praeter Delum. |
| „ | XIV. = „ Italiae et Siciliae. |

Niese = Niese, Geschichte der griechischen u. makedonischen Staaten.

Num. Chr. = Numismatic Chronicle.

Num. Zeit. = Numismatische Zeitschrift.

Pauly-Wissowa = Pauly-Wissowa, Real-Encyclopädie der classischen Altertumswissenschaft.

Philol. = Philologus.

Ramsay, *C.B.* = Ramsay, Cities and Bishoprics of Phrygia.

Rev. Arch. = Revue Archéologique.

Rev. Ét. Gr. = Revue des Études Grecques.

Rev. Num. = Revue Numismatique.

Rev. Philol. = Revue de Philologie.

Rh. Mus. = Rheinisches Museum.

Röm. Mitth. = Mittheilungen des Deutschen Archäologischen Instituts, Römische Abtheilung.

Roscher = Roscher, Lexicon der Mythologie.

T.A.M. = Tituli Asiae Minoris.

Z. f. N. = Zeitschrift für Numismatik.

Transliteration of Inscriptions.

[] Square brackets to indicate additions, *i.e.* a lacuna filled by conjecture.

() Curved brackets to indicate alterations, *i.e.* (1) the resolution of an abbreviation or symbol; (2) letters misrepresented by the engraver; (3) letters wrongly omitted by the engraver; (4) mistakes of the copyist.

< > Angular brackets to indicate omissions, *i.e.* to enclose superfluous letters appearing on the original.

. . Dots to represent an unfilled lacuna when the exact number of missing letters is known.

- - - Dashes for the same purpose, when the number of missing letters is not known.

Uncertain letters should have dots under them.

Where the original has iota adscript, it should be reproduced in that form; otherwise it should be supplied as subscript.

The aspirate, if it appears in the original, should be represented by a special sign, [†].

Quotations from MSS. and Literary Texts.

The same conventions should be employed for this purpose as for inscriptions, with the following *important exceptions* :—

() Curved brackets to indicate only the resolution of an abbreviation or symbol.

[[]] Double square brackets to enclose superfluous letters appearing on the original.

< > Angular brackets to enclose letters supplying an omission in the original.

The Editors desire to impress upon contributors the necessity of clearly and accurately indicating accents and breathings, as the neglect of this precaution adds very considerably to the cost of production of the *Journal*.

THE PEDIMENTS OF THE MAUSSOLLEUM.

SOME years ago I ventured on a reconstruction of the Maussoleum, that was based on the principle of not overlooking the sculptured fragments in a monument of which the great renown was due, according to Vitruvius, to the work of the sculptors who were employed in its decoration: *quorum artis eminens excellentia coëgit ad septem spectaculorum eius operis pervenire famam*.¹ That it was never published is owing to the uncertainty I felt about the measures of the remaining architectural fragments, which I had not the means to control.

Now since F. Adler published his monograph on the Maussoleum,² which only came to my notice a short time ago, I may venture to indicate in how far I think his reconstruction, which in many respects does not differ from what I supposed, ought to be corrected in accordance with our texts and principally with the extant sculptural fragments.

Several of these, mostly it is true in very poor condition and difficult of access, are omitted in every reconstruction, or find a place which hardly provides them with any direct relation to the monument and which is without analogy in Greek architecture.

A basis with a horseman is certainly not unknown in the history of Greek art, and even a *venatio* occurs now and then as an isolated work, but these are usually separate monuments, for which a place is provided as well as may be in an often already overcrowded locality, not intrinsic parts of a well-planned scheme, as they might be in a modern construction.

The consequence of this is, that the fragment of the horseman has been quadrupled first and has even grown out into eight prancing warriors in the reconstructions of Fergusson and Adler; but on the other hand I miss in every one of them the boar and the ram, which appeal much less to the imagination.

A thorough publication of all the sculptured fragments of the Maussoleum, that are not in relief, is sorely wanted. As some of them are in an extremely mutilated condition a photographic reproduction would not do for all. The draped fragments Nos. 1048–1050 and 1061–1065 and the helmet, No. 1059, would certainly want a very conscientious draughtsman, working

¹ Vitruv. vii. 1. 12.

² *Das Mausoleum der Halikarnass*, Berlin, 1900.

under the constant control of an archaeologist. Most of the heads, and the fragments of the animals, would allow of a photographic reproduction if it could be obtained.

But I do not think that it is absolutely necessary to wait till some English scholar will undertake this difficult but promising task, to draw some of the conclusions that may be deduced from the existence of these fragments, several of which could not find a better place than amongst pedimental sculptures.



FIG. 1.—COLOSSAL SEATED FIGURE FROM THE MAUSSOLLEUM.

The different size too of the diverse figures, varying from the colossal to life size, indicates such an employment, and may help to distribute each fragment to its relative place, nearer to the centre or the extreme corners of the composition. The colossal seated male figure, No. 1047 (Fig. 1), for example, would fit into or near the middle of a pediment and the helmet with the mask would suit the corner.

The colossal equestrian torso indeed would find its natural place in the centre of a pedimental composition. Analogies are not wanting. Of the

Heroon of Xanthos, the so-called Nereid monument, the left half only of the west pediment remains, but this shows just enough of the forelegs of a prancing horse to allow with absolute certitude the reconstruction of a horseman as principal figure in the centre of the composition. Of greater import still is the south pediment of the so-called sarcophagus of Alexander, where a horseman in Persian garments occupies the exact centre of the composition (Fig. 2). The likeness to the Maussoleum fragment is so close, that



FIG. 2.—'SARCOPHAGUS OF ALEXANDER,' FROM SIDON; SOUTH PEDIMENT.
(From Handy Bey and Reinach.)

with exception of the position of the right leg the torso seems the exact counterpart of this figure. As a helmet standing on the ground recurs in this same composition and the fragment No. 1064 is supposed to have worn a cuirass, one would be inclined to think of a battle scene for this pediment. This however would hardly account for numerous other fragments that may not be neglected. First of all No. 1095, the anterior half of a panther (Fig. 3), broken off behind the shoulder.³ The animal springs up with a movement that affords a close analogy to the panthers hunted in the basement-frieze of the sarcophagus of mourners.—I have not seen the hindquarters and a paw mentioned by Sir Charles Newton as corresponding in scale.⁴—There are half of the snout and both the feet of the forelegs of a wild boar at bay, which seem to allow of a reconstruction according to the south as well as to the north side of this frieze. Again there are fragments, which I have not seen, of a hound: part of the head, an arm, and a paw, mentioned by Sir Charles Newton.⁵ Nor can I give any further detail about the head of a lioness, presented by the British Government to the Imperial Museum at Constantinople⁶ or 'part of the hindquarters of this or another lioness' found in the excavations.⁷

The presence of two or three or even more different wild animals in

³ This animal has grown rather too large in my reconstruction by a mistake of the draughtsman.

⁴ *Halicornassus, Unidus, and Branchidae*, ii. p. 233.

⁵ *l. c.* 231.

⁶ *l. c.* 232.

⁷ *l. c.* 234.

the same hunting-scene is not improbable. The bas-relief of the short south side of the sarcophagus of 'Alexander' has only a panther, but the west side combines a lion and a stag; and the frieze of the sarcophagus of mourners, already mentioned, contains one bear, two wild boars, four panthers and five stags, not to mention the dead game that is hard to identify.

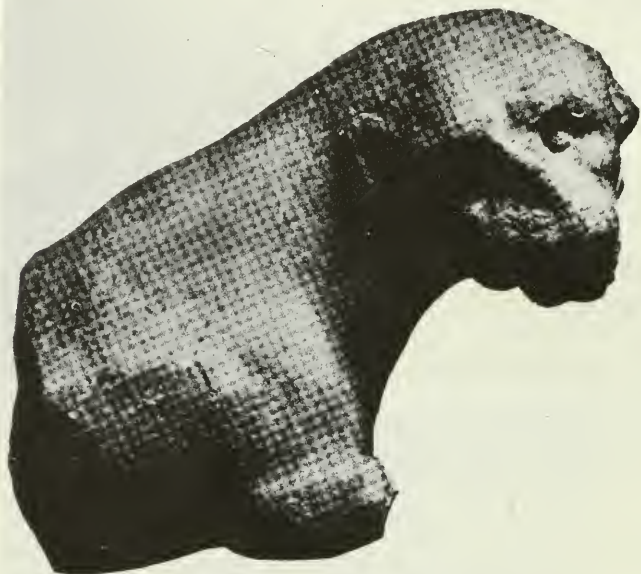


FIG. 3.—PANTHER FROM THE MAUSSOLLEUM.

I would therefore suggest that Maussollos himself, in the dress of a Persian Satrap, may have held, on a prancing horse, the middle of the pediment, attacking a lioness, supported on both sides by half armed attendants, hunting a panther and a wild boar. The fallen helmet may have belonged to the corpse of a victim of this perilous chase.

There are even more remnants of animals amongst the Maussolleum sculptures than those already named: the body of a colossal ram, No. 1097 (Fig. 4), a foot and part of the hind leg of which were also found; the head, forehead, and right hind leg of a boar No. 1096, 1-3, hardly exceeding life-size; and the large hoof of a bull, which I saw amongst the remains in the vaults of the British Museum and which is mentioned by Newton as possibly the hoof of an ox.⁷ The ram and the boar are not in violent action: they either stand still or move slowly. It is of course only a suggestion, but the combination of boar, ram, and bull reminds me of the Roman *suovetaurilia* and makes me think that that pediment, which must have held the colossal seated figure, may have represented an offering scene with precisely these animals.

As nothing, as far as I am aware, is known about Carian rites, this

must of course remain a mere conjecture, but that such a scene would not be inappropriate to a Heroon is shown by that of Xanthos, where an offering scene occurs in the lesser frieze.

I do not wish to lay much stress on the important place taken by the victims in the Parthenon frieze, which, though in the strictest sense, taken as a whole, an offering scene, is of quite a different character. On the other hand I would press the analogy of three contemporary pictures. We know little or nothing about the meaning of the famous sacrifice of bulls by Pausias, but, rather than some mythic or heroic subject, I would expect a political picture akin to Euphranor's work in the Stoa Basileios at Athens. Of Aristolaos too, the son of Pausias, a sacrifice of bulls is mentioned, and I cannot help thinking that all the figures mentioned by Pliny:⁸ Epameinondas, Pericles, Media, Virtue, Theseus, and the image of the Attic Demos, must



FIG. 4.—COLOSSAL RAM FROM THE MAUSSOLLEUM.

have belonged to one single composition, the centre of which was the *bœum immolatio*. Further, Apelles is known from Herondas (iv. 59 f.) to have painted the sacrifice of a bull for the Asklepieion of Kos, probably. Later Roman reliefs, as that of the *Ara Pacis*, the altar of Domitius Ahenobarbus,⁹ or the triumphal arch at Susa, may perhaps retain some distant reminiscence of these earlier compositions.

At all events the boar and the ram are not intended to be seen close at hand. The ram gains immensely in the reduction of our figure and would certainly, at the height of the pediment, have rendered admirably in marble its woolly fleece. Thus seen it seems not unworthy of Skopas. I will not say too much of the style of the colossal seated figure, our Fig. 1, as I have not had the occasion to compare it thoroughly with the Atalanta from Tegea (*B.C.H.*

⁸ *Nat. Hist.* xxxv. 137.

⁹ Furtwängler, *Intermezzi*, p. 36, d.

xxi. 1901, Pl. VI.), but I feel sure that there is nothing, at least in the treatment of the drapery, that would be in the way of our theory. The same holds good as to the Maenad in which Prof. Treu has recognized the most famous work of Skopas.¹⁰ The strong lines that mark the folds of our torso speak even more clearly in that work.

To which of the pediments the different heads and torsos may have belonged, it is hard to guess. The only presumption that presents itself is that, at all events, the female heads can hardly come from the hunting-scene, and will therefore belong to the east pediment, that of Skopas. Their style, as far as I see, affords no objection. No. 1051 is already described as 'in the manner of Skopas' by Mr. A. H. Smith in his Catalogue.

I feel less sure about No. 1057, a male head, wearing the *kyrbasia*, but as this headdress is much worn in the hunting-scenes I should be inclined to assign it to the west pediment, that of Leochares.

I am perfectly aware of the objections that have been made to the theory of Prof. Loescheke,¹¹ who seeks to find a reminiscence of the *venatio Alexandri* at Delphi (part of which, according to Plutarch,¹² was by Leochares), in a relief from Messene, but I do not think them of cardinal importance. Nor does it escape me that this work, the other part of which was said to be by Lysippos, was not erected by Krateros himself, but by his son Krateros whom he left an infant when he died in 321.¹³ But I think the extraordinary affinity of the horseman in this relief with the torso of the Maussolleum goes a good way to demonstrate that Prof. Loescheke was on the right scent and that we are not wrong in ascribing the equestrian fragment to Leochares.¹⁴

At least Lucian, who makes the shade of Maussollos say: τὸ δὲ μέγιστον, ὅτι ἐν Ἀλικαρνασσῷ μνῆμα παμμέγεθες ἔχω ἐπικείμενον, ἡλίκον οὐκ ἄλλος νεκρός, ἀλλ' οὐδὲ οὕτως ἐς κάλλος ἐξεσκημένον, ἵππων καὶ ἀνδρῶν ἐς τὸ ἀκριβέστατον εἰκασμένων λίθου τοῦ καλλίστου οἶον οὐδὲ νεῶν εὖροι τις ἀν ῥαδίως, would hardly have spoken thus of the quadriga and the small figures only if the really first rate sculptures had stood around the monument instead of forming an intrinsic part.

I have thus far abstained from the question whether a reconstruction of the Maussolleum would allow of the introduction of pediments in the architecture, though they are suggested, as has been observed, by the *brevius a frontibus* of Pliny. They are lacking in all projects of restoration which I have seen, save in that of Mr. Oldfield,¹⁵ and I cannot invoke him to my aid as his pediments are too small to contain the groups I propose, and as I could never accept the plan of his work. Adler, I think, has said all that is wanted to disprove his ingenious proposal.

But there is nothing which hinders us from introducing two pediments

¹⁰ *Mélanges Perrot*, p. 317.

¹¹ *Jahrb.* iii. (1888), p. 189.

¹² *Alex.* 40.

¹³ *P.C.H.* xxi. (1897), p. 598; Paul Perdrizet, *J.H.S.* xix. (1899), p. 273.

¹⁴ M. Perdrizet must surely be wrong in

finding a replica of the *venatio* in Mr. Evans' intaglio. The words of Plutarch: τοῦ βασιλέως τῷ λέοντι συνεστῶτος exclude a fallen king.

¹⁵ *Archaeologia*, liv. (1895), p. 273.

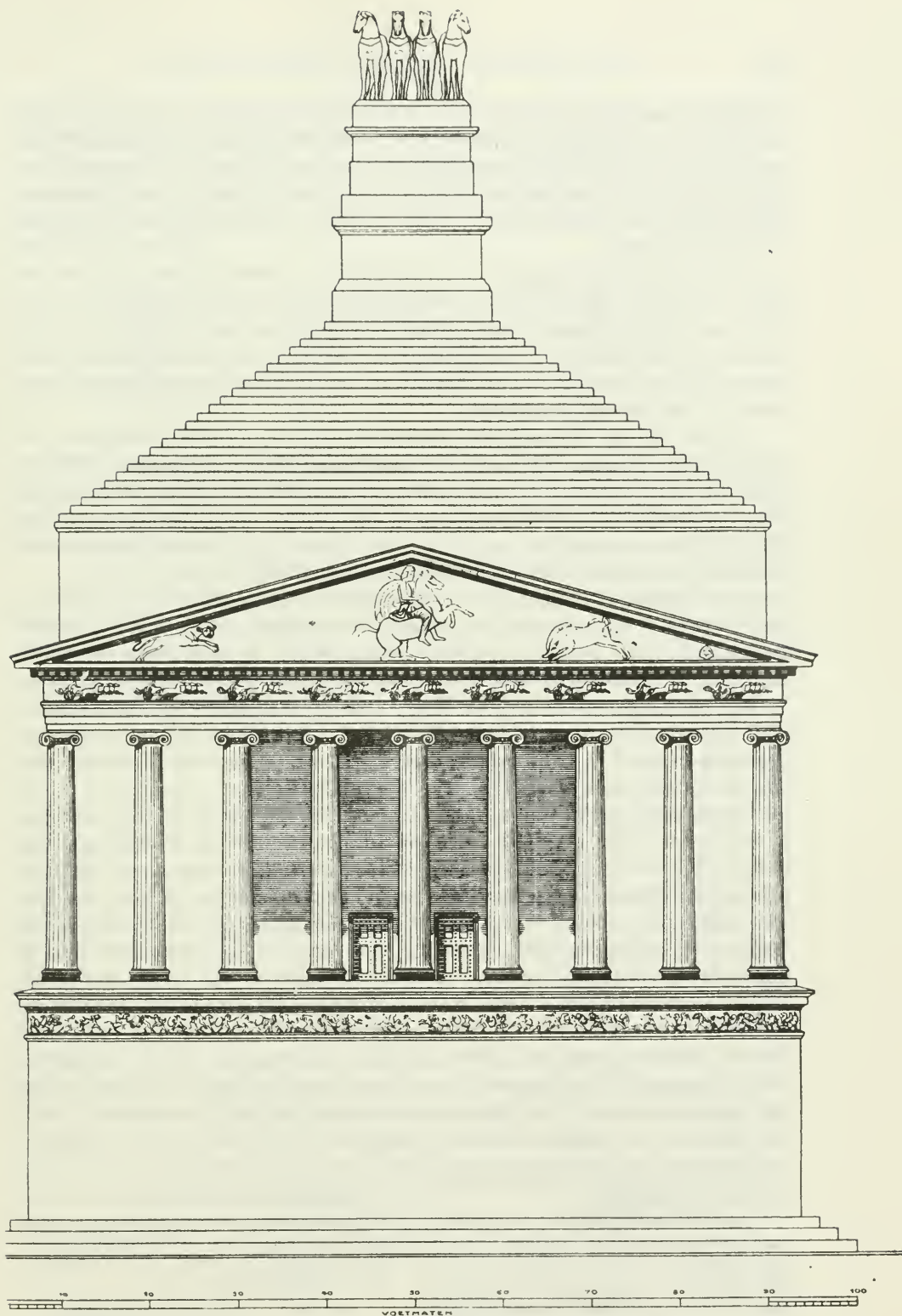


FIG. 5.—SUGGESTED ELEVATION OF THE MAUSOLLEUM.

in Adler's reconstruction, if we may be allowed to elevate the attica, which he rightly assumes, by some feet (Fig. 5). This would only, I think, be to the advantage of the building, if compared with antique analogies. We ought then to make it 15 ft. high,¹⁶ so that with the 24 steps of the pyramid, that are about 22½ ft., the height equal to the pteron of 25 cubits, that is 37½ ft., would be obtained.

I would further suggest on the top of this pyramid a basis, the *meta* of Pliny, of 22½ ft., carrying the quadriga with the statues¹⁷ of 12½ ft. or of 25 ft. and 10 ft. without them. Thus only 30 ft. out of the 140 ft. would remain for the solid basement, which I hold is an enormous advantage over most of the proposed reconstructions, as it would bring the sculptured frieze nearer to the eye of the spectator.

If we add to the suggested measures of 30 ft. for the basement and 37½ ft. for the pteron, 12½ ft. for the pediments, with a tympanum of 10 ft. high, we find 80 ft. to the top of the pediment, the exact measure given by Hyginus as that of the Maussoleum. The cypher of Vibius Sequester of 180 ft. is then a contamination of the values given by Pliny and Hyginus, and this looks more likely than the double error accepted by Adler.

And that of a building like the Maussoleum the height should be mentioned without the surmounting spire is no wonder. Who would think of recording the total height of a Gothic church, with a spire on the cross vault, like that of Haarlem or Alkmaar, without including the tower expressly, as Baedeker does, just as well as Pliny? About the palace at Amsterdam, the ancient townhouse, which allows of a closer comparison, Baedeker expresses himself in this guise: 'It measures 33 metres high and the cupola . . . is 51 metres.'

As to the high measures I have accepted for the basis of the quadriga, I feel sure that they are corroborated on all sides, notwithstanding that I failed to find a form pleasing to the eye in following the suggested restoration of the Lion-tomb. My arguments are first the words of Pliny who speaks of a *metae cacumen*, then the comparison of analogies as the Lion-tomb at Cnidus, but especially the later large works that show influence of the Maussoleum, as the tomb of Hadrian and the Tropaeum of Trajan at Adam-klessi. Pullan's restoration of the Lion-tomb and that of the Mausoleum of Hadrian by Hülsen after Borgatti¹⁸ are more or less hypothetical, and thus open to criticism. The most convincing parallel, however, is the Tropaeum Trajani, as it has been drawn by Prof. Reichhold after the reconstruction of Prof. Niemann, corrected by Prof. Furtwängler¹⁹ in a way that has been accepted by Prof. Beudorf.²⁰ The support of the trophy

¹⁶ When speaking of feet I mean Greek feet of 0.328 m., not English.

¹⁷ The statues, if not in the quadriga, may have either stood in the cella, or in the east pediment or even perhaps on the long sides against the attica, above each column a statue. I doubt very much whether the lions could have stood there, as Adler makes them,

rather than on the peribolos wall.

¹⁸ *Röm. Mitth.* vi. (1891), 138.

¹⁹ *Das Tropaeum von Adamklessi und provincial-Römische Kunst, Abhandlungen der k. bayr. Akademie der Wiss.* I. Cl. xxii. Bd. iii. Abt. München, 1903, Pl. I.

²⁰ *Jahresh.* vi. (1903), p. 249, Fig. 132.

there is at least a fourth part of the whole monument, with the trophy as restored it certainly is more than half of the entire height.

Returning to the earlier analogies, it seems worth while to compare the proportions of the Lion-tomb, as restored by Pullan, with those of the Maussoleum. I have to that effect reduced the measures of this monument to a modulus of $\frac{1}{140}$.

| | Maussoleum. | | | Lion-tomb. | |
|-----------------------|------------------|------------------|------|------------|------|
| Quadriga | 10' | $12\frac{1}{2}'$ | } 35 | lion c. 13 | } 39 |
| Meta | 25' | $22\frac{1}{2}'$ | | c. 26 | |
| Pyramid steps | $22\frac{1}{2}'$ | | } 75 | c. 20 | } 28 |
| Attica | 15 | | | c. 8 | |
| Pteron | $37\frac{1}{2}'$ | | | c. 47 | |
| Basement | 30 | 30 | | c. 26 | |
| | <hr/> 140 | | | <hr/> 140 | |

The greatest divergency is in the proportion of the columns and order to the pyramid and this of course is a result of the smaller plan, that requires a lower attica and less steps to let the *meta* rise out above the order when seen from a short distance.

I feel, however, serious doubts about the usual interpretation of the word *meta* here. The form designated as meta is always conic, as in the *meta sudans*, a pile of wood, a hayrick, a sugar-loaf, a trained boxtree, a cypress, the shadow of the earth, or a hill, as in these words of Livy: ²¹ *Ipse collis est in modum metae, in acutum cacumen a fundo satis lato fastigatus*, that seem to illustrate the text of Pliny. ²²

As this shape would never do for the basis of a quadriga I suspect Pliny once more wrongly translated a Greek word. This must of course have been *σῆμα*, which means *goal* as well as *tomb*. The idea of the architect will have been to combine the three elements of a heroon, a pyramid, and a tomb into one single new form.

We have found till now only the facts about the sculpture and the interpretation of Pliny's words pleading for pediments, and we ought to look out for analogies. We might of course find these in the heroon of Xanthos (the so-called Nereïd-monument) as well as in the Pisidian tombs of Tib. Cl. Agrippina Aurelia Ge and Aurelia Artemis ²³ if the pyramid and meta were not lacking there as well as the attica. On the other hand the existing monuments, that with the pyramid combine an attica, show no trace of pediments. It is precisely the combination of pediments and attica that we must look for. There is but one monument of Greek art of this period that shows a similar combination, that is the sarcophagus of the mourners (Fig. 6), where the unexplained parapet suggests the influence of a work showing the disposition we propose, as well in this astounding peculiarity as in the basement that supports the whole and makes it akin, not to the ancient temples, but to the group of sepulchres, the most glorious of which is the Maussoleum.

Moreover, the combination of pediments and attica is not rare in Roman

²¹ xxxvii. 27.

²² Forcellini, *i. v. meta*.

²³ Heberdey und Wilberg, *Jahresh.* iii. (1900), 117.

architecture, especially in the triumphal arches, of which that of Tiberius at Orange is the most splendid example. If we knew the prototype of the Roman triumphal arch, which, as Dr. Paul Graef²⁴ suggests, ought to be sought in the gates or porches and the tetrapylon of the Hellenic city, I have no doubt we should find more material there, as the propylaea of the Acropolis at Athens show already the embryonic beginning in the superposition of the pediments.

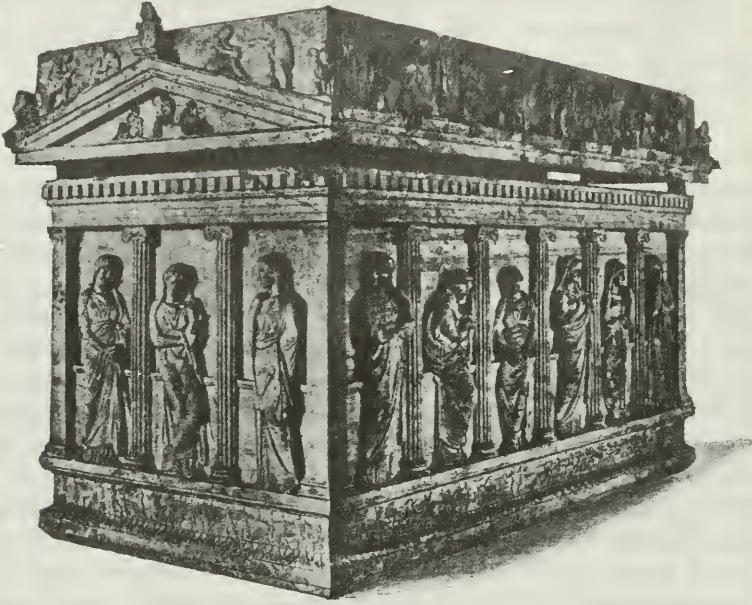
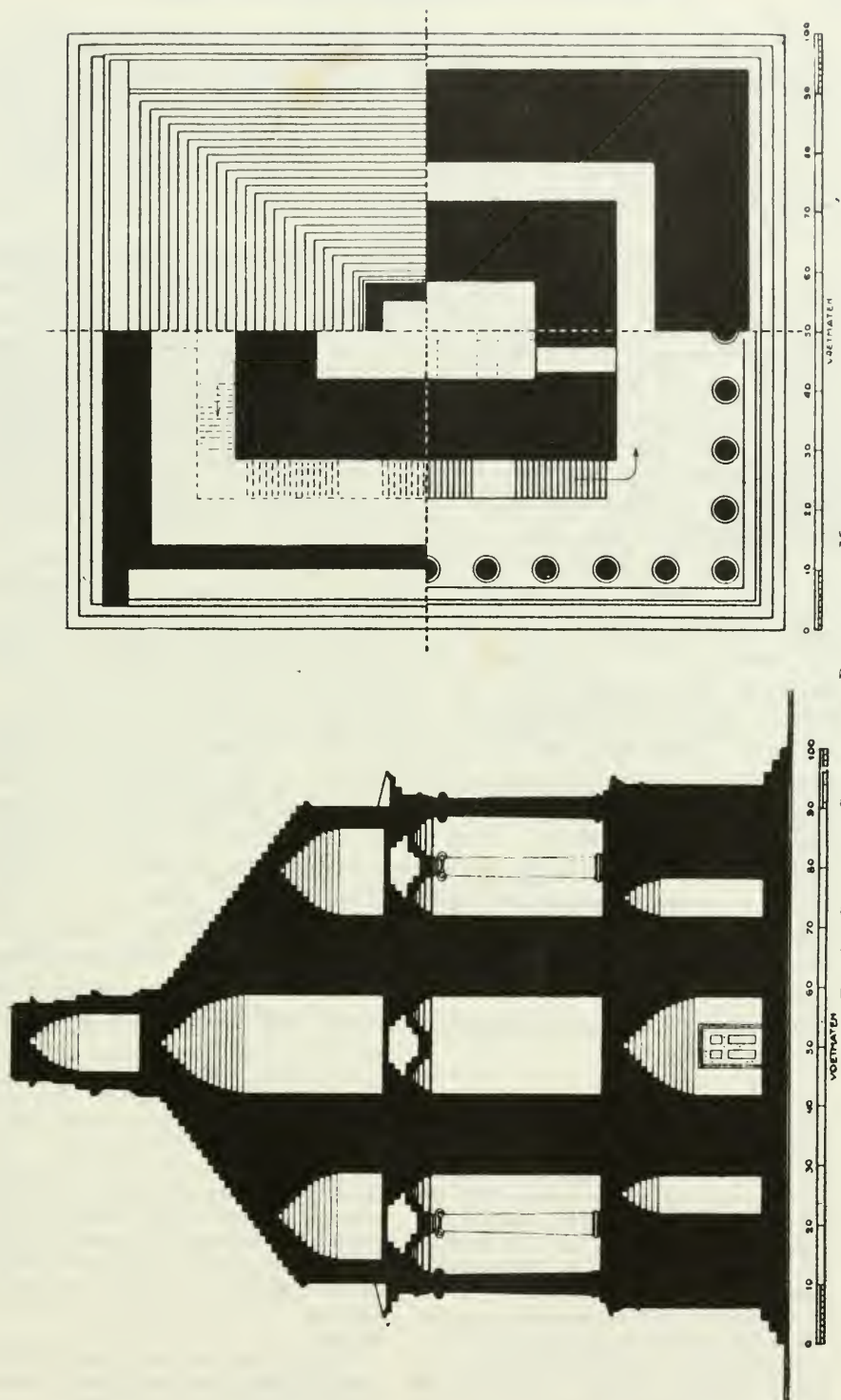


FIG. 6.—‘SARCOPHAGUS OF THE MOURNERS,’ FROM SIDON.

I have expressed the measures of my reconstruction in Greek feet instead of giving the values as calculated by Adler in metres, and I think the following specification of Greek feet reduced to metres will show, by comparison with the figures of Adler, the difference to be so small that it may be neglected. I will add another consideration. The figures expressed in feet show fractions. Some of these will disappear when reduced to cubits, but all of them cannot be reduced to cubits any more than the whole sum of 140 feet. Still it is easy enough to obtain whole numbers if we are allowed to accept a modulus of $2\frac{1}{2}'$ and I have introduced in the first column this experiment.

| | Modulus of $2\frac{1}{2}'$. | Greek feet. | Metres. | Measures of Adler in metres. |
|----------------|------------------------------|---------------------------|------------------|---------------------------------|
| Quadriga . . . | 4 } or { 5 } 14 | 10 } or { $12\frac{1}{2}$ | 3·28 } or { 4·10 | 4·05 |
| Meta . . . | 10 } | 25 } or { $22\frac{1}{2}$ | 8·20 } or { 7·38 | |
| Pyramid. . . | 9 | $22\frac{1}{2}$ | 7·38 | 7·44 |
| Attica. . . | 6 | 15 | 4·92 | |
| Pteron . . . | 15 | $37\frac{1}{2}$ | 12·30 | 12·27 (11·50) |
| Basement . . | 12 | 30 | 9·84 | |
| | <hr/> 56 | <hr/> 140 | <hr/> 45·92 | |

²⁴ Baumeister, *i.v. Triumph- und Ehrenbogen*, p. 1872.



I should even like to ventilate the question, if it is really impossible that the height of the pteron should be so divided, that $7\frac{1}{2}'$ would fall to the order and $30'$ to the columns. That would make for these 9.84 m. instead of the calculated height of 9.69 and for the order 2.46 instead of the measured 2.58 . The introduction at this place of the frieze of charioteers, which I would still prefer,²⁵ would only bring with it a reduction of 0.02 and would leave a difference of 0.10 and I do not insist.

I find a remarkable confirmation of my reconstruction in the proportions I have unwittingly come to. The height of the main building of $80'$ falls into two large sections: the basement of $30'$ and the superstructure of $50'$; that is to say they stand in the relation known as the *sectio aurea*.²⁶ The same division recurs if we look to the whole construction, where we again find the *sectio aurea* in the pyramid and meta that rise $50'$ above the $80'$ of the main building and bring the entire work that bears the quadriga to $130'$. So that the real standard of this work would be the height of the quadriga of $10'$ whereof the modulus we found would be the quarter.²⁷ It is hardly chance that would lead to proportions so generally admired in architecture.

I cannot abandon this subject without proposing one more problem.

Adler deals rather cavalierly with the *patet ab austro et septentrione sexagenos ternos pedes* of Pliny and his correction of this measure, written in full letters in the manuscripts, into 89 feet is altogether arbitrary. Adler calculates the distance from the axis of one column to the other at 3.34 m. If we again substitute for this value the nearest in Greek feet we obtain $10'$ (3.28) which makes hardly any difference and is as we have seen the standard measure of the whole monument. Thus $63'$ would nearly correspond to 7 columns with the 6 intercolumnia, the column having a largest diameter of 1.14 , nearly $3\frac{1}{2}'$. May we not be allowed to take this for the length of the cella? The front sides that were shorter, according to Pliny's *brevius a frontibus*, ought then to have been only $43'$. The nine columns in front would take from axis to axis $80'$ (equal to the height of the pediment top) and the eleven columns on the long sides $100'$. This would bring us to a sum of $360'$. Ten feet from these axial lines to the outside of the basement on all sides, would make the sum of $440'$ named by Pliny for the circuit (Fig. 7).

²⁵ The chariot race may of course have occupied the long sides, and the fronts may have held some other subject that would be better adapted, as the preparations for the race and the crowning of the victor. Still the archaistic relief, with Apollo, Artemis, and Leto, in the Villa Albani, the Berlin Museum and the Louvre (Schreiber, *die Hellenistischen Reliefbilder*, xxxiv, xxxv, and xxxvi) have a chariot race as well on the front as on the side of the temple seen in the background.

²⁶ I remind my readers that the *sectio aurea* divides a length in such a way that the quadrate of the larger part is equal to the

whole multiplied by the smaller. This never can be expressed in whole numbers, but is approached by the following series: $1:2=2:3=3:5=5:8=8:13=13:21=21:34=34:55=55:89=89:144$ etc., wherein each fourth number is the sum of the preceding first and second. It is evident that figures from 3 – 13 are in use here, not the higher series from 34 till 144 . Which shows once more that not single feet, but the standard of 10 ft. is in use here.

²⁷ This is what the Greek author failed to see who thought he was very clever in reducing the $37\frac{1}{2}'$ of the pteron into 25 cubits.

This means, however, that the basement would measure 120' by 100', *i.e.* 39.36×32.80 m. instead of 38.91×33.09 m. (127×108 English feet) as given by Adler. But as he must needs have his measures from the rather untrustworthy plan of Pullan, this small difference of 0.45 m. and 0.29 can hardly be of any importance.

The plan would certainly gain by the proposed disposition in loftiness. Strong cella-walls perhaps 13' thick, would leave a chamber of $37' \times 17'$, and bear the bulk of the weight of the pyramid, the *meta*, and quadriga, and a wider pteron would better permit the approach by a flight of stairs.²⁸

The form proposed is akin to the pseudodipteros, which Vitruvius²⁹ tells us was first used by Hermogenes as an *octostylon*, as we know in the temple of Artemis at Magnesia. But this is certainly no objection. The Mausolleum is *enneastylon* and then Vitruvius is speaking at this place about the temple and would not have introduced a sepulchre in this context. It is further known that the pretended innovation must have been only in detail or in the marble construction, as the type occurs as early as the temple G at Selinus, of course with a wooden roof. So rather than an objection the work of Hermogenes provides a parallel to the plan proposed for the Mausolleum.

The large distance which has to be covered over the pteron is no insurmountable difficulty and we may accept in principle a solution akin to that proposed by Pullan. (Pl. XXI. fig. 1.)

As to the bulk of the pyramid I would propose to cover those parts, that must have been hollow to lessen the weight, by overlapping stones, building a false arch.

Be this however as it may, the loftier the construction looks, and the weightier the pyramid appears to the eye the better it suits the words of Martial³⁰

*Aëre nec vacuo pendentia mausolea
Laudibus immodicis Cares ad astra ferant.*

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²⁸ Mr. van Balen, who has drawn my plans for me, has indicated the stairs in the basement with dotted lines in the horizontal section through the attica.

²⁹ iii. ii. 8.

³⁰ *Epigramm.* i. 1.

WRESTLING.

I.

A.—*The Nature of the Evidence.*

THE popularity of wrestling among the Greeks is proved by the constant use of metaphors from this sport and by the frequency with which scenes from the wrestling ring appear, not only in athletic literature and art but also in mythological subjects. Despite the changes in the spirit of Greek athletics caused by the growth of professionalism, which affected wrestling and boxing more perhaps than any other sport, the popularity of wrestling whether as a pastime or as a spectacle remained unabated. On early black-figured vases Heracles is constantly represented employing the regular holds and tricks of the palaestra not only against the giant Antaeus, but against monsters such as Achelous or the Triton, or even against the Nemean lion, and centuries later we find Ovid and Lucan describing these scenes in language borrowed in every detail from the same source.

Hence the evidence at our disposal is more abundant and more varied than in the case of any other sport, and its interpretation is proportionately difficult. An obvious difficulty lies in the wide diversity of the evidence as to time and place. The majority of the monuments are not later than the fourth century B.C., but geographically they extend from Smyrna and Alexandria to Rome and Etruria, while the scattered records of literature, extend from Homer and Pindar to Quintus Smyrnaeus and Nonnus, the bulk of the descriptive evidence being found in the Greek and Roman writers of the Empire. We might have expected that evidence so varied would reflect the local variations in style which we know to have existed,¹ and the changes which so long a period must have introduced, and that it would be impossible to come to satisfactory conclusions. But though we must constantly bear in mind the possibility of such variations, we shall find that the difficulty is more apparent than real, and that the agreement in the evidence is extraordinary. This result may be due partly to the close connexion of athletics with religion, which doubtless tended to preserve unchanged the traditional laws governing the great athletic festivals, and partly to the conservatism of artistic types, and to the imitative character of later art and literature, as a consequence of which the descriptions of Roman poets probably reflect the earlier traditions of Greece more closely than the practices of their own day and country. The chief

¹ Krause, *Gym. der Hell.*, p. 428.

change which we can observe is the increasing popularity of the pankration and its methods as opposed to the more skilful and less brutal methods of true wrestling.

A more real difficulty is found in the technical vocabulary of Greek wrestling, which was as strange and varied as that of our own day. Many of the terms explain themselves; others, especially those connected with the names of places and persons, defy interpretation. We have some hints as to the styles in favour at Sparta and Argos, but 'the Thessalian chip,' 'the Sicilian style,' 'the chip of Phrynichus,' are as unintelligible to us as 'the half-nelson,' or 'Cumberland and Westmorland,' will be to archaeologists of future ages. Almost as puzzling and yet more tantalising on account of the apparent simplicity is the technical use of common words such as *βάλλω* and its compounds. Scholiasts and lexicographers afford us little assistance in these cases, the only explanation they often vouchsafe for wrestling terms being *ἐξαπατᾶν*, and we can only conjecture their meaning by careful comparison of the few passages in which they occur.

In the present paper I propose to consider the conditions and general principles of Greek wrestling, reserving for my next article the discussion of the various attitudes, grips, and throws adopted by the Greek wrestler. For our knowledge of the latter we are chiefly indebted to the vase-painter; at present we are concerned for the most part with literary evidence.

B.—*The Oxyrhynchus Papyrus and the Teaching of Wrestling.*

The most important recent contribution to our knowledge of Greek wrestling is the papyrus of the second century A.D. published by Messrs. Grenfell and Hunt.² It contains instructions for a wrestling lesson, and throws an interesting light on the methods of Greek training. The various holds and throws appear to have been taught as a kind of drill to one or more pairs of wrestlers. Two interesting parallels are quoted by the editors, a curious passage from the *Asinus* of Lucian illustrating the erotic symplegma³ and an epigram from the *Anth. Pal.* XII. 206 consisting of a dialogue between the instructor and the pupil.

The passage from Lucian contains a multitude of wrestling metaphors but being mostly connected with the ground wrestling of the pankration they do not concern us at present. The epigram is very instructive; the first couplet contains the trainer's orders

ἦν τούτῳ φωνῆς, τὸ μέσον λαβὲ καὶ κατακλίνας
ζεύγνυε καὶ πρώσας πρόσπεσε καὶ κατέχε.

The pupil who is apparently younger than his opponent protests that this is too difficult

² *Ox. Pap.* iii. 466.

³ Lucian, *As.* c. 9. Cp. Aristoph. *Pax* 895, *Av.* 442, and the expressions *ἀνακλινοπάλη*,

κλινοπάλη; Martial xiv. 201, Suetonius *Domit.* 22. In all these cases the metaphors are from the pankration rather than from true wrestling.

οὐ φρονέεις, Διόφαντε, μόλις δύναμαι γὰρ ἔγωγε
ταῦτα ποιεῖν· παίδων δ' ἡ πάλη ἐσθ' ἑτέρα.

And the trainer replies by telling Cyris, the other pupil, to pretend to be in difficulties and allow his opponent to make his attack, offering only a passive resistance.

ὀχλοῦ καὶ μένε, Κῦρι, καὶ ἐμβάλλοντος ἀνάσχου·
πρῶτον συµμελετᾶν ἢ μελετᾶν μαθέτω.

Two points deserve notice here. The system of training was progressive, there were special rules for boys and men. Secondly, in this method of teaching the stronger and more experienced must help the weaker. *πρῶτον συµμελετᾶν ἢ μελετᾶν μαθέτω*. This principle of cooperation in antagonistic exercises is a fundamental principle of the remarkable system of training in Japan known as jiu-jitsu. It is arranged beforehand which of the opponents is to win, and the other offers just enough resistance to benefit his adversary to the utmost.⁴

C.—*Heats: the Bye.*

Competitions in wrestling, boxing, and the pankration were conducted by the Greeks in the same manner as a modern tournament. Lucian's description of the method of drawing lots for the ties at Olympia is well known⁵. Lots marked in pairs with the letters of the alphabet in succession and corresponding to the number of the competitors were thrown into a silver helmet sacred to that purpose from which each competitor in turn drew a letter. In case of an odd number there was only one lot marked with the last letter used. Thus with an entry of seven there would be two A's, two B's, two Γ's, but only one Δ, the drawer of which was the bye or *ἔφεδρος*. After each round there was a fresh draw conducted in the same way.

The number of competitors varied. Sometimes a famous athlete would be allowed a walk-over, in which case he was said to win *ἀκονιτεῖ*. Dromeus of Mantinea won such a victory in the pankration in *Ol.* 75, for the first time on record, says Pausanias.⁶ In an inscription at Olympia⁷ enumerating the victories of the Diagoridæ of Rhodes, Dorieus is mentioned as victorious *πύξ ἀκονιτεῖ*. A well-known epigram on Milo⁸ describes a similar victory, but such cases were rare, and the evidence shows that as a rule there were from five to twelve entries, requiring therefore three or four rounds. Thus Pindar describes the pankratiast Alcimedon⁹ and the wrestler Aristomenes¹⁰ as each of them victorious over four rivals, that is, in four rounds. Lucian in the passage referred to above mentions from four to twelve competitors, and the

⁴ H. J. Hancock, *Japanese Physical Training*, passim.

⁵ *Hermotim.* 40.

⁶ Paus. vi. 11, 4.

⁷ *Inscript.* v. *Olymp.* v. 153.

⁸ *Anth. Pal.* xi. 316.

⁹ *Ol.* viii. 90, ἐν τέτρασιν παίδων ἀπεθήκατο γυίοις | νόστον ἐχθιστον.

¹⁰ *Pyth.* viii. 81, τέτρασι δ' ἔμπετες ὑψόθεν σωμάτεσσι.

evidence of various Olympic inscriptions agrees with such an estimate. A fourth century inscription on Xenocles¹¹ speaks of him as

ἀπτήης μονοπαλᾶν τέσσαρα σώμαθ' ἐλών.

ἀπτήης appears to be equivalent to ἀπτώς,¹² and μονοπάλης¹³ is used in contrast to the pankratiast of the wrestler pure and simple, to whom it would be an especial distinction never to have been thrown in any round or any bout.

A later inscription on the boxer Philippus¹⁴ tells us that he

τέσσαρας εὐθείᾳ παῖδας ἔκλινε μάχᾳ.

Lastly a long epigram on Ariston,¹⁵ who won the pankration in *Ol.* 207, tells us that there were seven competitors

ἐπτὰ γὰρ ἐκ παίδων παλάμας μόνος οὐκ ἀνέπαιψα

and that Ariston himself was victor in three rounds

τρίσσα κατ' ἀντιπάλων ἄθλα κονεισάμενος.

Ariston claims it as a special merit that he never had the advantage of a bye, but was ἀνέφεδρος

οὐ γὰρ ἐν εὐτυχίῃ κλήρου στέφος ἀλλ' ἐφεδρείης
χωρὶς ἀπ' Ἀλφειοῦ καὶ Διὸς ἡσπασάμην.

A competitor who had drawn a bye must have had a great advantage in the next round over a less fortunate rival and the crown must often have depended on the luck of the lot. It is to such an accident that Pindar refers at the close of the Sixth Nemean ode when he says that Alcimidas and his brother were deprived of two Olympic crowns by the κλᾶρος προπετής.

The importance of the bye is yet more clearly demonstrated by an inscription of the reign of Trajan in honour of Ti. Claudius Rufus of Smyrna.¹⁶ It describes how having undergone a strict course of training under the eyes of the Hellanodikai he gave an exhibition in the games worthy of Olympian Zeus, and of his own training and reputation. For though ἀνέφεδρος he conquered the most formidable opponents in the pankration, and in the final tie, though matched against one who had drawn a bye (ἐφεδρείαν λελογχότα), he kept up the struggle till nightfall and made it a draw. The Eleans in consequence passed a special decree allowing him to erect a statue with an inscription commemorating this drawn match which was as honourable as a victory: τῆς ἱερᾶς ἦν μόνος ἀπ' αἰῶνος ἀνδρῶν ἐποίησεν. The expression ἡ ἱερὰ appears to have been used for a dead heat or a drawn match because, in such cases, the crowns were dedicated to the god, a practice further

¹¹ *Inscript. v. Olymp.*, 164.

¹² Cp. *ib.* 183. Similarly in Phlegon's list of Olympic victors for *Ol.* 177, Ἰσίδωρος Ἀλεξ-
ανδρεὺς πάλην ἡπτωτος περιόδον.

¹³ Cp. Paus. vi. 4, 6, epigram on Chilon =

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Anth. Pal. App. i. 102 and Bacchylides xii. 8.

¹⁴ *Inscript. v. Olymp.* 174.

¹⁵ *Ib.* 225, 226.

¹⁶ *Ib.* 54.

illustrated by another inscription, unfortunately much mutilated, detailing the arrangements for the games of Sebaste at Naples,

ὅσα δ' ἂν τῶν ἀθλημάτων ἔρημα ἢ ἱερὰ γίγνεται.¹⁷

On Panathenaic and other vases representing boxing and wrestling competitions a third athlete is generally present, who is usually described as an ἔφεδρος. I venture to doubt whether he is correctly so described. The very frequency of this addition suggests that the vase painter thus indicates the general character of the competition as a tournament rather than the presence of an actual ἔφεδρος.

D.—*The Skamma and Various Details as to the Wrestlers.*

The wrestling ground was called the skamma, a term which, as has been explained in a previous article, denotes a place dug up, levelled, and sanded so as to afford a smooth and soft surface.¹⁸ In the palaestra the skamma occupied the open space in the centre, and for actual competitions a similar space must have been provided in the stadium, probably in the semicircular σφειδόνῃ where such existed. In Heroic times wrestlers and boxers wore a loin-cloth or περίζωμα,¹⁹ which appears occasionally on black-figured vases,²⁰ but all clothing appears to have been discarded before the fifth century. Sometimes indeed we see wrestlers provided with caps protecting the ears, ἀμφώτιδες,²¹ but their use was apparently confined to boys and to practice and was not allowed in open competitions. For similar reasons wrestlers always wore their hair short.²² Before wrestling they not only oiled their bodies but rubbed them with sand, a service which Lucian describes them as performing for one another.²³ The object of this process, on which Lucian waxes eloquent, was partly to harden the skin and check the perspiration, partly to enable the opponents to obtain a firm hold of one another.²⁴

E.—*The Differences between Wrestling and the Pankration.*

In the Greek athletic festivals wrestling, besides being a separate event in the programme, formed part of the pentathlon. As far as we know the wrestling in both cases was governed by the same rules. But wrestling was also one of the elements in the pankration, and in order to decide whether any particular scene or description belongs to wrestling proper or to the

¹⁷ *Ib.* 56, l. 17. Other instances of this phrase and a full discussion of it will be found in the notes on inscription 54 by Dittenberger and Furgold.

¹⁸ *J.H.S.* 1904, p. 73.

¹⁹ *Hom. Il.* xxiii. 683, 700; *Thuc.* i. 6.

²⁰ *E.g. Mus. Greg.* xvii. 1, a; v. Scherer, *De Olympionicarum statu*, p. 20.

²¹ Panaetius kylix, *Arch. Zeit.* 1878, 11;

Krause, p. 517, n. 20.

²² Philostratus, *Im.* ii. 32; Eurip. *Bacchae*, 455; *Plut. Arat.* ii. 3, 6.

²³ Cp. Ovid, *Met.* ix. 35; Statius, *Theb.* vi. 847.

²⁴ *Anacharsis* 2, 28, 29; *Plut. Symp.* iv. αἱ μὲν γὰρ παλαιόντων ἐπιβολαὶ καὶ ἑλξεις κονιορτοῦ δέονται.

pankration it is important to realise clearly the distinction between the two events.

The first and fundamental difference is that the wrestler merely sought to throw his opponent, victory being decided by the best of three or five bouts, whereas the pankratiast's object was by any lawful means to force his adversary to acknowledge himself defeated, and for this purpose one bout only was necessary. This distinction enables us to decide at once that the descriptions of Ovid, Lucian, Statius, and Heliodorus refer not to wrestling proper but to the pankration, which appealed so much more to the debased taste of the Roman populace.

A throw not being sufficient in the pankration, the struggle was continued on the ground, and we find a distinction made between *ὀρθή πάλη*, the very name of which proclaims the necessity of keeping on the feet, and ground wrestling, called by the Greeks *κύλισις* or *άλίνδησις*, which was confined to the pankration. I hope to show that in the former it was essential to keep on the feet and that a wrestler who touched the ground with his knee or any part of his body except the feet was considered thrown. Hence, whenever we see the struggle continued on the ground, we may feel sure that the pankration and not true wrestling is represented.

Moreover, hitting and kicking were allowed to the pankratiast, and these provide an additional test for distinguishing him from the wrestler who, as has been already noticed, is therefore described as *μονοπάλης*. Probably we may place in the same category seizing an opponent by the legs, but even without this we have sufficient tests.

The distinction between the pankration and wrestling on the one hand and boxing on the other is nowhere more clearly stated than in Theocritus xxiv. 110

ὅσσα δ' ἀπὸ σκελέων ἔδρυστρόφοι Ἀργόθεν ἄνδρες
ἀλλάλους σφάλλοντι παλαίσμασιν, ὅσσα τε πύκται
δεινοὶ ἐν ἱμάντεσσιν, ἃ τ' εἰς γαῖαν προπεσόντες
πάμμαχον ἐξεύροντο σοφίσματα σύμφορα τέχνη.

The *ἱμάς* or boxing thong is the characteristic of the boxer, ground wrestling of the pankratiast, the throw of the wrestler.

In this connexion it is worth while to recall the fact that wrestling, at all events in the early days before it was corrupted by professionalism, was free from all suggestion of that brutality which has often brought such discredit on one of the noblest of sports. Tradition represented Palaestra²⁵ the daughter of Hermes as the inventor of the art, and Theseus to whom the rules of wrestling were ascribed is said to have learnt them from Athena herself.²⁶ Grace and skill were of far more account than mere strength,²⁷ and

²⁵ Philostratus, *Im.* ii. 32.

²⁶ Paus. i. 39, 3; Schol. Pindar, *Nem.* v. 49.

²⁷ Cp. Pindar, *Ol.* viii. 19; ix. 91, 110; *Isth.* vi. 20, and *passim*; *Anth. Plan.* iii. 2, App. 86. Aelian, *Var. Hist.* ii. 4, tells us of a trainer who punished a pupil merely because the popu-

lace applauded him: 'ἀλλὰ σύ γε κακῶς καὶ οὐχ ὥς ἐχρῆν ἐποίησας ὕπερ ἐχρῆν ἔμεινον γένεσθαι· οὐ γὰρ ἂν ἐπῆνεσαν οὗτοι τεχνικόν σε δρᾶσαντά τι.' Eurymenes who won a victory at Olympia in 472 B.C. (*v. Ox. Papyri* II. 222) was trained at Samos by Pythagoras, and

the wrestling matches of Theseus and Heracles with Cercyon and Antaeus are but one of the many forms in which the Greeks imaged forth the triumph of civilisation over barbarism.

F.—*Distinctive Features of Greek Wrestling. The Fall.*

The two essential points which distinguish one style of wrestling from another are the definition of a fair throw and the nature of the holds allowed. In most modern styles, including the so-called Graeco-Roman, a man is considered thrown only when both shoulders, or a shoulder and a hip, are touching the ground at the same time, but in the Cumberland and Westmorland style he is thrown if he touches the ground with any part of the body. It has generally been asserted that in Greece the only throw recognised was a throw on the back.²⁸ But this idea seems to be due to the tendency to ascribe to the ancients the practices of modern athletics, a mistake facilitated in this case by the misleading use of the expression Graeco-Roman.

The principal evidence for the view that a clean throw on the back was required is a passage from the *Suppliques* of Aeschylus, l. 90, where the chorus dwelling on the inscrutability and infallibility of the ordinances of Zeus exclaims

πίπτει δ' ἀσφαλές οὐδ' ἐπὶ νώτῳ
κορυφᾷ Διὸς εἰ κρανθῇ πρᾶγμα τέλειον.

'The perfect deed ordained by the brow of Zeus falls'—to use a colloquial expression—'on its feet, not on its back.' This meaning of ἀσφαλές agrees perfectly with the common use of the verb σφάλλω as a wrestling term, and the whole expression is obviously intelligible to anyone who has seen a wrestler after being swung round and round by his opponent land safely on his feet. At the same time it is dangerous to draw definite conclusions as to the laws of Greek wrestling from such a passage: for the metaphor, applicable as it is to wrestling proper, is equally applicable to the rough and tumble of the pankration or of actual warfare, where the combatant who is thrown heavily on his back is completely at the mercy of his opponent. But even if we grant the connexion of the passage with wrestling proper, it certainly does not prove that the throw on the back was the only throw that counted; it proves at the most that such a throw was a fair throw, which no one has ever denied. By a curious oversight Paley, who in his note on the lines definitely lays down the law that victory consisted in three clean throws, *i.e.* in the

though small of stature, thanks to the σοφία of Pythagoras, defeated many mighty opponents, Diog. Laert. viii. 1. 12. On the other hand Damagetas in an epigram puts into the mouth of a Spartan youth the typically Spartan boast that he owed his victory to brute force, not to skill

κεῖνοι τεχνάεντες· ἐγὼ γε μὲν ὡς ἐπέοικε

τοῖς Λακεδαιμονίων παισὶ, βίᾳ κρατέω,

Anth. Plan. I. 1.

and Plutarch, *Apophthegm. Lac. Var.* 27 (233 E), tells us that the Spartans allowed no trainers for wrestling, ἵνα μὴ τέχνης ἀλλ' ἀρετῆς ἡ φιλοτιμία γένηται.

²⁸ Smith, *Dict. Ant.* s.v. 'lucta.'

adversary being laid on his back three times,' and Mr. Tucker who follows Paley, supply the evidence for their own refutation. 'If a wrestler fell on the knee,' they say, 'it was no defeat,' and in support of this they quote the *Agamemnon* l. 63 *sqq.* and the *Persae* l. 914.

The passage from the *Agamemnon*,²⁹ proves nothing. *παλαίσματα* is no doubt originally an athletic term, but its metaphorical use to denote any form of struggle is so obvious and so frequent that often it almost ceases to be a metaphor. In the present passage the metaphor of the palaestra is dropped immediately and passes into the language of actual warfare. The words *γόνατος κοιλίαισιν έρειδομένου*—the words for which the commentators quote the passage—though singularly inappropriate to any form of wrestling but ground wrestling, exactly express the attitude of the warrior as we see him represented in the Aeginetan marbles and on many a vase, kneeling down to receive the charge of the enemy, or beaten on to his knees in the *mêlée*. The picture is completed by the words *διακναιομένης κάμακος*. 'The snapping asunder of the spear'³⁰ is a detail which can have no possible connexion with wrestling.

The passage referred to from the *Persae* is far more to the point, but it absolutely contradicts the conclusion in proof of which it is quoted. The chorus lamenting the downfall of Persia cry

'Ασία δὲ χθών, βασιλεὺ γαίης,
αἰνῶς, αἰνῶς ἐπὶ γόνυ κέκλιται.

Here there can be no doubt that the metaphor is taken from wrestling, nor can there be any doubt that the words express a decisive fall, the very opposite of that described by *πίπτει ἀσφαλές*. The whole context, and the twice repeated *αἰνῶς* leave no doubt of the completeness of the defeat. The very same metaphor is used by Herodotus³¹ in describing the catastrophe which befel the Chians. The gods, he says, had already sent two disasters upon them by way of warning, *μετὰ δὲ ταῦτα ἡ ναυμαχίη ὑπολαβοῦσα ἐς γόνυ τὴν πόλιν ἔβαλε*. The only possible conclusion from these passages is that a wrestler who fell on his knee was thereby defeated.

Mr. Tucker goes further than Paley and asserts that even a throw on the shoulder did not count, quoting in support of this statement the passage from the *Equites* of Aristophanes where the chorus, describing the dogged tenacity of the men of the older generation who had made Athens great, say

εἰ δέ που πέσοιεν ἐς τὸν ὦμον ἐν μάχῃ τινί
τοῦτ' ἀπεψήσαντ' ἄν, εἴτ' ἡρνοῦντο μὴ πεπτωκέναι
ἀλλὰ διεπάλαιον (l. 571).

²⁹ οὕτω δ' Ἀτρώεω παῖδας ὁ κρείσσων
ἐπ' Ἀλεξάνδρῳ πέμπει Ξένιος
Ζεὺς, πολυάνορος ἀμφὶ γυναικὸς
πολλὰ παλαίσματα καὶ γυιοβαρῇ
γόνατος κοιλίαισιν έρειδομένου
διακναιομένης τ' ἐν προτελείοις
κάμακος θήσων Δαναοῖσιν
Τρωσί θ' ὁμόλως.

³⁰ I have adopted the old interpretation of this expression, which seems to me so obviously appropriate to the context as to admit of no doubt. If, however, Dr. Verrall's suggestion is correct, that the snapping of the shaft is part of the marriage ceremony, the passage has no connexion at all with wrestling.

³¹ vi. 27.

Once more Mr. Tucker's illustration is fatal to his theory. If the throw on the shoulder was not a fair throw, the force of the passage is lost. The point is that these old Athenians, however clearly they were thrown, would never admit a defeat, but would wipe off the dust and go on wrestling, as though they had not been thrown at all. They wiped off the dust solely to hide the evidence of their defeat: if a fall on the shoulder did not count there was no defeat, and therefore no need for hiding the evidence.

The conclusions which we have drawn from Aeschylus and Aristophanes are confirmed by the epigrammatists who speak impartially of falls on the back, the shoulders, the hip, and the knee. And their evidence is especially valuable because the wrestling expressions are used by them literally, not metaphorically.

For a fall on the back we have the epigram of Philippus on Damostratus, *Anth. Plan.* iii. 25

οὐ κατ' εὐγυρον πάλην
ψάμμος πεσόντος νῶτον οὐκ ἐσφράγισεν.

The epigram ascribed to Alcaeus on Cleitomachus who won a triple victory in the pankration, in boxing and in wrestling, tells us that he never fell on his shoulders, in language which recalls that of Aristophanes

τὸ τρίτον οὐκ ἐκόνισσεν ἐπωμίδας ἀλλὰ παλαίσας
ἀπτῶς τοὺς τρισσοὺς Ἴσθμόθεν εἴλε πόνους.

Anth. Pal. ix. 588.

Little weight can be attached to the epigram³² which relates how Milo advancing to receive the crown fell on his hip (ὤλισθεν ἐπ' ἰσχίου), whereupon the people cried out not to crown a man who had fallen without an adversary, but the epigram on the same athlete assigned to Simonides³³ gives considerable support to our contention as to falling on the knee.

Μίλωνος τόδ' ἄγαλμα καλοῦ καλόν, ὅς ποτε Πίσῃ
ἐπτάκι νικήσας ἐς γόνατ' οὐκ ἔπεσεν.

The conclusion to which the literary evidence has led us is supported by the evidence of the monuments. If the only fair throw was the throw on the back, we should at least expect to find some representation of it. As it is, there is as far as I know not a single vase, bronze, gem, or coin on which such a throw is depicted. The only possible exceptions are a B.F. hydria in Munich³⁴ representing the struggle between Heracles and Antaeus, and a small bronze of rather doubtful antiquity figured by Montfaucon.³⁵ But inasmuch as in both cases the struggle is still continuing, it is clear that the scene belongs to the pankration rather than to wrestling. On the other hand we have definite evidence as to the fall on the knee in a series of bronzes which appear to be imitations of some well-known Hellenistic

³² *Anth. Pal.* xi. 316.

³³ *Anth. Plan.* iii. 24.

³⁴ *Arch. Zeit.* 1878, x.

³⁵ Montfaucon, *Ant. Expl.* iii. 166, 2; Reinach, *Répertoire de la Statuaire*, ii. p. 538.

group.³⁶ They represent a wrestler who has fallen on one knee, while his victorious opponent stands over him, with one hand pressing down his neck and with the other forcing back his arm. We shall have to deal more fully with these bronzes elsewhere: for the present it is enough to notice that the standing wrestler has completed his throw and that there is no suggestion of any further attack or action on his part. His opponent has fallen on his knee, and is defeated.

A possible objection to the view put forward is suggested by a throw commonly represented on red-figured vases and in Etruscan wall-paintings apparently imitated from them. It is possibly the throw described by Lucian as εἰς ὕψος ἀναβαστάσαι³⁷ and is known to modern wrestling as 'the flying mare.' The victor throws his opponent clean over his head, but, as he does this, he is sometimes represented as sinking on one knee or on both. If the rule of 'first down to lose' were strictly observed, the wrestler who sinks on his knee should lose the fall. Three explanations are possible. The artist may have taken a liberty with his subject for artistic reasons in order to shorten the group and so make it more suitable to the space at his disposal. Such a motive certainly suggests itself in the case of the B.M. kylix E 94 where the wrestler is sinking on both knees, and the same type is repeated with less reason in an Etruscan wall-painting. A more probable explanation to my mind is that the laws of wrestling, which were evidently very elaborate, allowed such a movement in this particular throw, possibly from motives of humanity in order to lessen the severity of the fall. This idea receives some support from the attitude of the trainer, who when present appears anxious to check any unnecessary violence. A third explanation is suggested by the Baltimore kylix published by Hartwig, *Meisterschal.* Pl. LXIV., which shows on one side two wrestlers obtaining a grip, and on the other the completion of the fall in question. The fallen wrestler is on his back with his legs still in the air, while his opponent kneels over him with his right hand on his mouth and his left raised to strike. This detail proves the scene to belong to the pankration and suggests that this fact may also account for the kneeling position. All the throws of ὀρθὴ πάλη were allowed in the pankration, and this particular throw, involving as it does a heavy fall on the back, may well have been a favourite with the pankratiast as it is to-day with the Japanese wrestler.

G.—*Wrestling in Homer.*

It is unfortunate that we have only one description of a genuine wrestling match of any value, the description in the *Iliad*. Quintus Smyrnaeus and Nonnus merely imitate and enlarge upon Homer, introducing modifications

³⁶ B.M. *Bronzes* 853; Stephani, *C.R.* 1867, Pl. I.; *Jahrb.* 1898, p. 178; Reinach, *loc. cit.*

³⁷ *Anacharsis* 24. For vase-paintings representing this throw *v.* Hartwig, *Meisterschalen*, xv. b, and Fig. 20 a, b (= B.M. E 94); for

Etruscan wall-paintings, Dennis, *Cities and Cemeteries of Etruria*, ii. p. 323 (= Krause, *op. cit.* xii. b, 39 e); 327, 7 (Gori, *Mus. Etr.* iii. 84-87); 333 (= Dar.-Sagl. 4624); 343 (= Krause, xii. b, 39 b, *Mus. Chius.* exxvi.).

mostly borrowed from the pankration, while the late date of these writers makes their evidence less valuable even than that of the Roman poets.³⁸ But the descriptions of the latter, and with these we may class that in the *Æthiopica*³⁹ of Heliodorus, belong without exception to the pankration type where ground wrestling plays an important part and the fight is always to a finish.

The match between Odysseus and Ajax, as described in the *Iliad*,⁴⁰ is a genuine example of *ὀρθή πάλη*. No time was wasted in the preliminaries. Girding themselves they advanced 'into the midst of the ring and clasped each the other in his arms with stalwart hands like gable rafters of a lofty house.' The attitude familiar to us from the monuments is identical with that adopted by Westmorland and Cumberland wrestlers in the present day. Then came a struggle for a closer grip. 'And their backs creaked gripped firmly (*ἐλκόμενα στερεῶς*) under the vigorous hands, and sweat ran down in streams, and frequent weals along their ribs and shoulders sprang up, red with blood,⁴¹ while ever they strove amain for victory.' But when after much striving neither could gain an advantage, and the spectators grew impatient, Ajax suggested an expedient

ἢ μ' ἀνάειρ' ἢ ἐγὼ σέ.

There is here no suggestion of any trick on the part of Ajax, he merely proposes that each should in turn allow the other to obtain a fair grip and try to throw him by lifting him off the ground.⁴² There is no suggestion of unfairness, but such a contest does give an advantage to the heavier man. Odysseus, however, was equal to the occasion and as Ajax lifted him, not forgetful of his art, he struck him behind the knee with his foot and so brought him to the ground, falling heavily upon him.⁴³ Clearly, if any one won the fall, it was Odysseus. The chip used by Odysseus is that known to modern wrestlers as 'the outside click,' a variety of the backheel invaluable as a defensive move to the light-weight wrestler. 'The most expert light-weight,' says Mr. Armstrong, 'would have no earthly chance with a moderate heavy-weight were it not for the outside click, which should be plied directly he feels himself leaving his mother soil.'⁴⁴ The particular form of this chip where the stroke is made as high up as the knee is known as 'hamming.'

³⁸ Ovid, *Met.* ix. 32 sq.; Lucan, *Phars.* iv. 612 sq.; Statius, *Theb.* vi. 831 sq.

³⁹ P. 433 sq.

⁴⁰ xxiii. 707-739. The quotations are from the translation of the *Iliad* by Messrs. Lang, Leaf, and Myers.

⁴¹ A fragment of a red-figured kylix in Berlin, No. 2276, reproduced by Hartwig, *Meisterschal.*

12, though representing the pankration, gives a realistic illustration of these words.

figure to the right is not only bleeding copiously at the nose, but also bears on his back the marks of his opponent's fingers.

⁴² Pausanias viii. 40 describes a similar arrangement in boxing, Creuges and Damoxenus agreeing to strike one another in turn without guarding themselves. This was called a *κλίμαξ*.

⁴³ *Ως εἰδὼν ἀνδείρε' δόλου δ' οὐ λήθετ' Ὀδυσσεύς·

κόψ' ὕπθευ κώληπα τυχῶν, ὑπέλυσε δὲ γυῖα

καὶ δ' ἔβαλ' ἐξοπίσω· ἐπὶ δὲ στήθεσιν Ὀδυσσεὺς

κάππεσε. 725-728.

⁴⁴ *Wrestling* (All England Series), p. 8.

Next came Odysseus' turn: he tried to lift Ajax and moved 'him a little from the ground, but lifted him not, so he crooked his knee within the other's (*ἐν δὲ γόινυ γνάμψεν*) and both fell to the ground nigh to each other and were soiled with dust.' Eustathius in his note on the passage says that they fell sideways, *πίπτουσιν πλάγιοι*, and he describes the chip as *μεταπλασμόν* or *παρακαταγωγήν*, technicalities which appear to correspond to the 'hank' or 'inside click' of to-day. The fall must certainly have been inconclusive, it was what is known in Cumberland as a 'dog fall,' and no amount of ingenuity can assign the victory to Ajax.

At this point Achilles put an end to the contest and awarded to each wrestler an equal prize. Futile efforts have been made to justify this verdict by affirming that Odysseus won the first, and Ajax the second round. As we have seen, in the latter neither could claim the advantage, while in the former whatever advantage was gained belonged to Odysseus, who fell on the top of his opponent. But if Odysseus had won one fall, and Ajax had won neither, it is difficult to understand the justice of dividing the honours, and Odysseus surely was the last man to yield such a point. The explanation is simple: neither bout was conclusive, for neither wrestler kept his feet in either, and the inference is that when both wrestlers fell, no fall could be scored. Whether this principle held good in historical times there is no evidence to determine.⁴⁵ The principle is not unknown to modern wrestling, and the Homeric account establishes some slight presumption in its favour. Possibly it may be implied by Pindar's use of the adjective *ἄπτως* in describing the 'swift and sudden shock' by which Epharmostus threw his opponents.⁴⁶

H.—*Quintus Smyrnaeus and Nonnus.*

The wrestling matches described by Quintus Smyrnaeus and Nonnus need not detain us long. In the former,⁴⁷ the opponents are Ajax and Tydides. In the first bout Ajax obtains a firm grip on Tydides and tries to crush him or bend him backwards (*ἄξει*) but the latter by a combination of strength and skill slips the grip, and obtaining the lower hold lifts Ajax off the ground, getting his shoulder underneath, and at the same time twisting his foot round his opponent's leg 'on the other side,' he brings him to the ground and sits upon him. Tydides is clearly the winner.

In the second round there is a long and tedious struggle for a grip, Tydides trying to obtain a hold round Ajax' thighs. Ajax after vainly endeavouring to force him to the ground obtains a grip round his waist and turns him over heavily in a style which is associated in art especially with

⁴⁵ Nothing can be inferred from Pindar, *Pyth.* viii. 81, *τέτρασι δ' ἔμπετες ὑπόθεν σωματέσσι*. There is no authority for translating *ἔμπετες* 'fell uppermost upon.' Here and in Aeschylus, *Agamemnon* 1174, which Dr. Fennell in his

edition of the Pythian Odes quotes in support of his translation, *ἐμπίπτειν* has its usual meaning 'to attack.'

⁴⁶ *Ol.* ix. 91.

⁴⁷ *iv.* 215 sq.

Theseus.⁴⁸ At this point as in the *Iliad*, Achilles declares the match a draw and divides the prizes.

In Nonnus,⁴⁹ Aristaeus is opposed to Aeacus. The first round follows closely the Homeric model. Aristaeus tries to lift and swing Aeacus, who clicks his left knee with his heel and so throws him backwards. But the second bout diverges widely from Homer. Aeacus tries to lift Aristaeus, but failing to do so he springs suddenly round him and jumps upon his back, twisting his legs round his stomach and knotting his hand round his neck so that he cannot speak. The officials interfere to save him from death; 'for,' says Nonnus, 'there was no law such as later generations long ago devised by which the vanquished could give a sign of his defeat by turning down his thumb.' Here we have passed away from wrestling into the region of the pankration and the gladiatorial shows, and the particular trick described is, as I hope to show when dealing with the pankration, that known as *κλιμακισμός*.

These descriptions, though affording interesting illustrations of various grips, throw little light on the principles of *ὀρθή πάλη*. The only point on which they have any bearing is whether the *τρία παλαισματα* were three falls or three bouts, whether the wrestler had to win the best of five bouts or of three. Homer's description is in favour of three bouts; Quintus and Nonnus corroborate Homer, but, as they are obviously imitating Homer, their testimony has no independent value. Most of the passages referring to the *τρίαγμός*⁵⁰ admit of either interpretation. But the following line from a fragment of Sophocles 678 clearly implies three falls

τὶν' οὐ παλαίουσ' ἐς τρὶς ἐκβάλλει θεῶν;

So too Apollodorus⁵¹ describing the fight between Heracles and Eryx says that the former *τρὶς περιγενόμενος κατὰ τὴν πάλην ἀπέκτεινε*. With this agree the words of Seneca—*luctor ter abjectus perdidit palmam*—the definition of *τρίαχθῆναι* by Suidas as *τρὶς πεσεῖν*, the metaphorical use of *τριάξειν* and its cognates and especially their application to the pentathlon. So, though it is unwise to dogmatise upon a detail so liable to vary with time and place, I believe that three falls were necessary to secure victory, or the best of five bouts.

I.—*Legholds not allowed.*

We come now to the much more difficult question of what grips were allowed. In particular were legholds allowed, and was tripping allowed? The conclusions to which I have come are that in true wrestling no holds

⁴⁸ E.g. the Metope from the Theseum.

⁴⁹ *Dionys.* xxxvii. 553-601.

⁵⁰ The evidence on this point is collected in my article on the Pentathlon, vol. xxiii. p. 63 of this *Journal*. The quotation from Plato, *Enthydemus* 277 c, is inaccurate. It should be

'ἔτι δὲ ἐπὶ τὸ τρίτον καταβάλων ὥσπερ πάλαισμα ὤρμα τὸν νεανίσκον.' The inaccuracy does not affect the argument as the passage still implies three falls, Cleinias having been already twice thrown in the argument.

⁵¹ ii. 5, 10, 10.

were allowed below the waist and that various forms of tripping were allowed, though I doubt whether it was employed so freely as in some modern schools.

By far the most important passage dealing with the first question occurs in Plato *Leg.* vii. 796A, B. Speaking of the style of wrestling which he would encourage in his ideal state he says: *καὶ δὴ τά γε κατὰ πάλην ἂ μὲν Ἀνταῖος ἢ Κερκυὼν ἐν τέχναις ἑαυτῶν συνεστήσαντο φιλονεικίας ἀχρήστου χάριν ἢ πυγμῆν Ἐπειὸς ἢ Ἄμυκος, οὐδὲν χρήσιμα ἐπὶ πολέμου κοινωνίαν ὄντα, οὐκ ἄξια λόγῳ κοσμεῖν· τὰ δὲ ἀπ' ὀρθῆς πάλης, ἀπ' αὐχένων καὶ χειρῶν καὶ πλευρῶν ἐξειλήσεως μετὰ φιλονεικίας τε καὶ καταστάσεως διαπονούμενα εὐσχήμονος ῥώμης τε καὶ ὑγιείας ἔνεκα, ταῦτ' εἰς πάντα ὄντα χρήσιμα οὐ παρετέον.* Plato, who was himself an athlete, is here contrasting the methods of ὀρθῇ πάλη, which was an exercise of skill practised in a spirit of honourable rivalry and promoting the healthy and harmonious development of the body, with the more brutal methods elaborated by bullies such as Cereyon and Antaeus for mere personal vainglory and love of strife. His language leaves no doubt that he is really thinking of the pankration which he elsewhere expressly excludes from his state.⁵² The pankratiast, like the bully, sought by all means in his power to reduce his opponent to helplessness and to force him to acknowledge defeat, and the result in both cases was not infrequently fatal. Plato then contrasting wrestling with the pankration defines the former as consisting in the disentangling of neck and hands and sides. These are precisely the holds which we see constantly represented in art, and we may note in passing the accuracy of the description, for the wrestler's art is shown even more in his ability to escape from a grip than in his skill in fixing one.

Plato in this passage makes no mention of legholds, but the scholiast commenting on it tells us that Theseus invented *τὴν ἀπὸ χειρῶν πάλην*, and Cereyon *τὴν ἀπὸ σκελῶν*. Now inasmuch as the wrestling of Cereyon and Antaeus is contrasted with ὀρθῇ πάλη and is therefore connected with the ground wrestling of the pankration, we are justified in also connecting with the latter the phrase *τὴν ἀπὸ σκελῶν*.

The meaning of this phrase is, however, ambiguous; it may denote either legholds, or the use of the legs in tripping. Eustathius clearly understood it in the latter sense, for in his note on the *Iliad* already referred to⁵³ he says of the first bout in which Odysseus struck with his foot the back of Ajax' knee *πρῶτος δέ, φασίν, Κερκυὼν εὔρε τὴν τοιαύτην παλαιστικὴν μηχανὴν καὶ καλεῖται ἰγνύων ὑφαίρεσις*. Evidently the scholiast to Plato and Eustathius drew their information from a common source, or one of them took it from the other. But there seems some reason for supposing that Eustathius has mistaken the meaning of *τὴν ἀπὸ σκελῶν πάλην* and *ἰγνύων*

⁵² *Leg.* 834 A. The verdict of the fourth century should not unduly prejudice us against the pankration. Originally an exercise of skill like boxing and conducted in the true spirit of

sport, like boxing also it degenerated into brutality under the influence of specialisation and professionalism.

⁵³ 1327, 8 κ.

ὑφαίρεσις. A writer describing the methods of Antaeus and Cercyon would naturally have in his mind the conventional representations of these giants in art. The discussion of these mythological types must be postponed for the present; it is sufficient here to note that Antaeus is commonly represented either actually seizing or trying to seize Heracles by the ankle, and Cercyon when lifted off his feet by Theseus frequently appears to be catching at the hero's legs.⁵⁴ This trick is generally described as τὸ ἔλκειν, though there is as far as I know no authority for thus narrowing down the meaning of ἔλκειν except a wrong reading in a passage of Lucian's *Dialog. Deorum* vii. 3, where we read χθὲς δὲ προκαλεσάμενος τὸν Ἑρώτα κατεπάλαισεν εὐθὺς οὐκ οἶδ' ὅπως ὑφελὼν τὼ πόδε. The old reading for which there seems to be no authority was ὑφέλκων τὼ πόδε, the new and correct reading ὑφελὼν brings us back to ὑφαίρεσις. Even so the passage is ambiguous and might denote equally well a leghold or tripping, but the evidence of the vases seems to me to prove conclusively that 'leg wrestling' traditionally associated with Cercyon was not tripping but seizing the opponent by the leg.

With the mythological scenes we may compare certain Panathenaic vases⁵⁵ where one of the opponents is represented as having caught the other by the leg and lifting him up seems on the point of overthrowing him. His opponent has his arm raised as if about to strike him with his fist, a fact which proves that the scene represents, not as is commonly stated wrestling, but the pankration. The same motive occurs in a long series of the Pamphylian coins of Aspendus, and occasionally upon gems, and the trick might be described as ἰγνύων ὑφαίρεσις with quite as much propriety as that employed by Odysseus. In some of these scenes it seems as if one of the pair was endeavouring to kick the other in the stomach,⁵⁶ and that the latter has seized his foot in the air. Kicking was certainly allowed in the pankration, and is alluded to by Theocritus xxii. 66 as one of the distinctions between the pankration and boxing. Amycus, who is put by Plato in the same class as Antaeus and Cercyon, challenges Polydeuces, who asks

πυγμάχος ἦ καὶ ποσσὶ θενὼν σκέλος, ὄμματα δ' ὀρθά;

Galen, too, in his amusing vision of an Olympic festival in which the animals wrest all the crowns from man, assigns the prize for boxing to the bull, that for the pankration to the donkey who λαξ ποδὶ εἰ βούλεται ἐρίσας αὐτὸν τὸν στέφανον οἴσεται. (*Προτρεπτ. ἐπὶ τέχνας*, 36.)

Here then we have two practices—catching an opponent's leg and kicking—which certainly belong to the pankration and are far more suitable to the character of Cercyon than the trick employed by Odysseus. Kicking

⁵⁴ The vase-paintings representing these two subjects are collected by Klein, *Euphronios*, pp. 122 and 193.

⁵⁵ *M. d. I.* i. 22, 8b and 10b (I have failed to discover where these vases are now); amphora in Lamberg collection, *J.H.S.* i. Pl. VI.

⁵⁶ Lucian, *Anacharsis* 9, refers to kicking in

the stomach, λακτιζόμενον ἐς τὴν γαστέρα; cp. Aristoph. *Eq.* 273, 454, γαστρίζειν. Pollux, iii. 150, includes in his list of terms connected with the pankration, λαξ ἐνάλλεσθαι, an expression very descriptive of the left hand pankratiast in the Lamberg amphora.

we know was not allowed in wrestling; legholds are only represented or described⁵⁷ in connexion with the pankration, and from the omission of any mention of them by Plato we may infer that they were not allowed in ὀρθὴ πάλη. This view is confirmed by the practical consideration of the riskiness of such a trick in a style of wrestling in which it was essential to keep on the feet ὀρθοστάδην, and in which the man who touched the ground even with his knee lost. The wrestler who stoops low enough to seize his opponent's foot is certain to be forced on to his knees if he misses his grip, and according to Statius such a fate actually befel Tydeus in his match with Agyllus

fictumque in colla minatus
 crura subit: coeptis non evaluere potiri
 frustratae brevitae manus: venit arduus ille
 desuper, oppressumque ingentis mole ruinae
 condidit.—*Theb.* vi. 876.

Fortunately for Tydeus the match was fought under the rules of the pankration.

L.—*Tripping.*

We have seen how important a part tripping played in the Homeric wrestling match. After Homer we have little evidence beyond the frequent metaphorical use of ὑποσκελίζειν⁵⁸ until we come to Lucian. In the first chapter of the Anacharsis describing the athletes in the palaestra he says οἱ μὲν περιπλεκόμενοι ὑποσκελίζουνσιν, and again in chapter 24 πολεμίῳ ἀνδρὶ ὁ τοιοῦτος συμπλακεῖς καταβρίψει τε θᾶσσον ὑποσκελίσας καὶ καταπεσὼν εἴσεται ὡς ῥᾶστα ἐξανίστασθαι. In the Oxyrhynchus wrestling papyrus one of the instructions is σὺ βάλε πόδα, words which seem to denote some movement of the foot for the purpose of tripping an adversary. Lastly, Philostratus, *Gym.* 35, describing the physical qualities of the wrestler, asserts that the βουβῶνες must be εὐστραφεῖς, for so they are συνδῆσαι ἱκανοὶ πᾶν ὅπερ ἂν ἡ πάλη παραδιδῶ καὶ συνδεθέντες ἀνιάσουσι μᾶλλον ἢ ἀνιάσονται. The words 'ὅπερ ἂν ἡ πάλη παραδιδῶ' confine the expression to such clicks as are allowed in true wrestling, excluding the more complicated grips with the legs possible in ground wrestling.

This evidence though somewhat scanty is sufficient to prove that tripping was practised by the Greeks, though probably not to the same extent as in some modern styles. This conclusion is supported by the monuments; for though tripping is as far as I know never represented by the vase painter, it

⁵⁷ Thus in Ovid, *Mel.* ix. 37; Lucan, *Phars.* iv. 612; Statius, *loc. cit.* Lucian, *Anacharsis* 1, describes how one youth ἀράμενος τὸν ἕτερον ἐκ τοῖν σκελοῖν ἀφήκεν εἰς τὸ ἔδαφος, but the context proves that he is speaking of the pan-

kration.

⁵⁸ Plato, *Euthydem.* 278 B; Demosthenes 273. ἀγκυρίσαι is used by the comic poets in the same way, Aristoph. *Eq.* 262; Eupolis, *Τάξ.* 6.

is clearly implied in the group of bronzes mentioned above.⁵⁹ In these bronzes the way in which the victor's left foot is twisted round his opponent's clearly shows that he must have employed this foot in twisting him off his balance.

The moment shown in these bronzes, as has been already stated, is one of rest: the standing wrestler has thrown his opponent, and the victory is won. If, however, he were to continue the attack he would fall on his opponent in precisely the attitude represented in the famous Uffizi group of wrestlers. This group belongs to the pankration and not to true wrestling, and I should not have mentioned it here, were it not that the contrary is stated in a most interesting article by Hans Lucas which appeared in last year's *Jahrbuch*,⁶⁰ with much of which I fully agree. Comparing the marble with the wrestling groups in a Roman mosaic from Tusculum,⁶¹ he concludes that the artist of the mosaic had in his mind the marble group, and that the right arm of the victor, which in the restoration is raised with clenched fist as if for striking, is wrongly restored 'because the scene belongs *manifestly* not to the pankration but to wrestling, where striking was not allowed,' and he therefore suggests that he is rather preparing to seize his fallen opponent by the neck in order to strangle him in the manner represented in the mosaic. With the correctness of the restoration I am not concerned here. I will confine myself to two remarks. In the first place the scene does not *manifestly* belong to true wrestling. It has been shown that the wrestler's object was to throw his opponent, and that there is no proof that he had to throw him on his back or force him to acknowledge defeat. In the Uffizi group the undermost wrestler is manifestly down and yet the struggle still continues. Hence it belongs to the pankration. Another equally unfounded statement sometimes urged against the actual restoration of the group is that in the pankration hitting was not allowed when the opponents were on the ground. This is a gratuitous assumption, and is quite contrary to the evidence of the vases. Secondly, supposing that the restoration is wrong and that the motive of the group is τὸ ἄγχειν, I submit that this form of strangling is utterly incompatible with true wrestling inasmuch as its object is not to throw the opponent, but to incapacitate him. Therefore the Uffizi group still belongs to the pankration, as does the corresponding group in the mosaic.

M.—Conclusion.

It may be convenient to sum up the conclusions at which we have arrived :—

1. If a wrestler was thrown on his knee, hip, back, or shoulder, it was a fair fall.

⁵⁹ P. 23 n. 36.

⁶⁰ P. 127 sqq.

⁶¹ *M. d. I.* vi. vii. 82, Schreiber, *Atlas* xxiii. 10.

2. If both wrestlers fell together, nothing was counted.
3. Three falls or the best of five bouts were necessary to secure victory.
4. No holds were allowed below the waist.
5. Tripping with the feet was allowed.

These general laws may have been, and indeed were probably modified at different times and different places. We know for example that the Sicilians had rules of their own.⁶² But the general agreement of the evidence seems to show that at all events in the great athletic festivals wrestling was conducted on the above principles.

E. NORMAN GARDINER.

(*To be continued.*)

⁶² Aelian, *Var. Hist.* xi. 1: 'Ορίκαδμος πάλης ἐγένετο νομοθέτης, καθ' ἑαυτὸν ἐπινοήσας τὸν Σικελῶν τρόπον καλούμενον.

NOTES AND INSCRIPTIONS FROM SOUTH-WESTERN MESSENIÀ.

I.—*Introduction.*

THE following notes and inscriptions represent part of the results of a journey made in the spring of 1904, supplemented and revised on a second visit paid to the same district in the following November. One inscription from Korone, a fragment of the '*Edictum Diocletiani*,' I have already published (*J.H.S.* 1904, p. 195 foll.). I have attempted to state as briefly as possible the fresh topographical evidence collected on my tour, avoiding as far as possible any mere repetition of the descriptions and discussions of previous writers.

The literature dealing with this part of Greece is not extensive. I give here a list in chronological order of the more important works in which its geography and antiquities are discussed, and append to each the abbreviated title which I shall use for purposes of reference.

1. Pausanias iv. 34, 35.
2. W. M. Leake, *Travels in the Morea*, i. 428-448: London, 1830.¹
[Leake.]
3. A. Blouet, *Expédition Scientifique de Morée*, i. 9-18 and Plates 8-17:
Paris, 1831. [Blouet.]
4. E. P. Boblaye, *Recherches Géographiques sur les Ruines de la Morée*,
111-113: Paris, 1835. [Boblaye.]
5. Bory de St. Vincent, *Expédition Scientifique de Morée. Section des
Sciences Physiques. Relation.* Paris, 1836. [Bory.]
6. W. M. Leake, *Peloponnesiaca*, 195-197: London, 1846. [Leake,
Peloponnesiaca.]
7. E. Curtius, *Peloponnesos*, ii. 165-172, 195-196: Gotha, 1852.
[Curtius.]
8. C. Bursian, *Geographie von Griechenland*, ii. 172-175: Leipzig, 1868.
[Bursian.]
9. J. G. Frazer, *Pausanias's Description of Greece*, iii. 445-456: London,
1898. [Frazer.]

¹ Leake's *Morea* was not published until 1830, though the journeys to which it relates were taken twenty-five years previously, in 1805 and 1806.

For the geology of the district, Philippon, *Der Peloponnes*, p. 355-377, should be consulted. A full bibliography is given at the end of this work (p. 611-616).

It is a pleasant duty to take this opportunity of expressing my warm thanks to those who, either by their generous hospitality or by the ungrudging way in which they placed at my disposal their knowledge of local antiquities, contributed largely to the pleasure and success of my tour; especial mention is due to Mr. P. Torelopoulos, demarch of Methone, Mr. C. Bebonis of Korone, Messrs. P. and N. Klappas of Kandianika, and Dr. D. Marcopoulos of Petalidhi.

II.—*Methone.*

Pausanias (iv. 35) tells us that Methone lay on the site of the Homeric *Πήδαρος*, and that it derived its name either from Methone, a daughter of Oeneus, or from the *Μόθων λίθος* which protected its harbour. It was given by the Spartans to the Nauplians who had been driven from their home for their philo-Laconian sympathies by Damocratidas of Argos, and remained undisturbed even on the restoration of the Messenians by Epaminondas. Subsequently it was desolated by a band of Illyrian corsairs, who, under pretence of trade, enticed to their ships and kidnapped a large number of its inhabitants. It was made a free city by Trajan. To these facts we may add the abortive attempt of the Athenians to gain possession of Methone at the outset of the Peloponnesian War—an attempt in the frustration of which Brasidas won his first laurels (Thuc. ii. 25)—and its siege and capture by Agrippa shortly before the battle of Actium (Dio Cass. L. 11, 3; Strabo viii. 4. 3). The only temples mentioned by Pausanias are those of Athena Anemotis, 'the wind-stiller,' founded by Diomedes, and of Artemis: that which most attracted the traveller's notice was a well of bituminous water, which leads him into a long excursus on remarkable wells and springs.

The modern town lies wholly outside and to the N. of the Venetian fortress, which is now uninhabited and is rapidly falling into ruin: it is situated on the southernmost spur of the long ridge of *Ἅγιος Νικόλαος*² which runs due N. from here and terminates above Pylos. The eastern wall of the fortress is built in part on ancient foundations, and considerable remains are left of the ancient mole running parallel to this wall from the rock which may be identified³ as the *Μόθων λίθος* of Pausanias: this is joined to the mainland by a ruined bridge, and on it rises an octagonal tower, originally built to protect the harbour but subsequently used as a lantern and a prison. A mole built in 1895-6 runs eastward from the landing-place (Blouet, Pl. 15, fig. II. E) through the extremity of the ancient jetty, thus completely cutting off the old harbour, which is too shallow to be of any use: to the N. of this mole sailing boats can approach close to the fortress, but the

² Perhaps the ancient *Τομεύς* (Thuc. iv. 118. 4; Steph. Byz. s.v.).

³ Blouet, p. 12; Leake, p. 430.

coasting steamers which call at Methone in the summer season have to anchor out in the bay. In the ruined chapel of 'Αγία Σοφία⁴ within the fortress are eight small columns of white marble, one of shell conglomerate, a fluted Ionic column of black limestone, and a much damaged Ionic capital of white marble.⁵ On the top of a Byzantine capital with an ornament in relief on the two short sides is a late inscription (No. 1, below), the first which has been found at Methone. From the E. the fortress and town are approached by a bridge which rests on ancient foundations (Curtius, p. 170).

Though scanty, this evidence seems to warrant our placing the ancient Methone on the site of the medieval fortress, and also, perhaps, of the modern town (see esp. Blouet, p. 12).

Three other sites in the neighbourhood call for a few words of comment :

(1) Gell (*Itinerary of the Morea*, p. 54) says : ' E. of Modon, about 2,700 paces from the city, is a place called Palaia Mothone, where are the vestiges of a city, with a citadel, and a few marbles. It is difficult to determine the date of the ruins.' The spot in question is about 1½ miles N.E.⁶ of the modern town and lies in the valley of the upper Methone River and on the northern slope of the low ridge which forms the left bank of the river valley. The site still bears the name Παλαιὰ Μεθώνη, and a large ruined church near by as well as the quantity of stones everywhere in evidence seems to indicate that there was once a village here. But there are now no vestiges of antiquity to be seen, the walls which were pointed out to me as such being medieval. I was shown Pausanias' 'bituminous well,' but my informants admitted that the water is perfectly sweet and clear! I think it is not impossible that at some time previous to the building of the fortress at Modon, the inhabitants, finding themselves too easy and accessible a prey to corsairs, may have migrated inland to this less exposed and better watered site, carrying with them the name of their town : in this case 'Old Methone' would be opposed to the new town of Modon.

(2) The members of the 'Expédition de Morée' found on the shore and neighbouring hills, 2 kms. E.⁷ of Modon, many Roman ruins, proving the existence there of baths and factories of coarse pottery, as well as a small temple situated on an eminence above the sea (Boblaye, p. 113). Here also I failed to discover traces of antiquity. In about the position indicated, where the hills rise to the E. of the plain of Methone, stood the old chapel of "Αγιος 'Ηλίας on a low cliff above the shore. But about fifteen years ago the encroachment of the sea caused a landslip which carried away half of the chapel, the remainder of which lies wholly in ruins : it has been replaced by a new church on the eminence to the N., about a hundred yards from the sea.

⁴ Blouet, Pl. 14, Figs. I, II.

⁵ The two capitals from Coron figured by Blouet (Pl. 17, Figs. II, III) now lie beside the N. door of the church of Μεταμόρφωσις in the fortress at Modon.

⁶ Gell's loose use of the term East has led Frazer to confuse this site with that referred to by Boblaye (see below).

⁷ Boblaye's '2 kilomètres à l'ouest de la ville' is obviously an error.

(3) Leake (p. 429) refers to the place called "Ἀγίος Ὀνούφριος, 1½ miles N. of the town, 'an excavation in the rock, which, since it ceased to be a Hellenic sepulchre, has been a chapel or hermitage, as appears by the remains of some Greek paintings.' In fact there is here a series of caverns or grottos, partly natural and partly artificial: the roof of the largest of these is supported by pillars of the living rock, and in front of it are a number of graves cut out of the rock. In the principal grotto the frescoes are still discernible, though almost obliterated by the smoke of shepherds' fires. Around the western and northern walls are niches with rock-cut tombs, and similar graves have been hollowed out in the floor. Above these caverns, and also further S. on the slope of the hill towards Methone, are very extensive rock-cuttings, perhaps the quarries of the ancient city.

Into the vicissitudes of Modon's eventful history in medieval and modern times I cannot here enter: but one important correction must be made. Blouet (p. 11) says that 'les remparts de Modon avaient été élevés, en 1514, par ordre du sénat vénitien,' and publishes the following inscription: 'D.O.M. Methonem communiri vallis moenus⁸ et propugna(eu)lis terra marique *mandavit Senatus Antonio Lauretano Pro(viso)ri G(e)n(er)ali Armo(ru)m in Peloponneso, qui tanti operis curam sustinens ad urbis et regni tutamen fortiora munimenta crevit et clausit anno Salutis MDXIV.*' This inscription, engraved on a block of dark grey marble, is now lying partly buried among the ruins of the church of 'Ἀγία Σοφία (see above): the portion of it which I read is printed in italics. The date, however, on the stone is MDCCXIV, not MDXIV. In 1498 Modon was captured from the Venetians by Bajazet II and remained in Turkish hands until 1685, when it was recovered for the Republic by Morosini.⁹ In 1714 the Venetians strengthened the defences of the fortress, as is witnessed by the above-quoted inscription and by a second one on a white marble tablet let into the northern wall above the moat,¹⁰

ANTONII LAVRETANI

EQV : GNLIS : ARM : IN PELOPONE

REGIMINE ET CVRA

ANNO MDCCXIV

'Antonii Lauretani Equ(itis) G(e)n(era)lis Arm(orum) in Pelopone(so) regimine et cura anno MDCCXIV.'

⁸ Probably MĒN^{ns}, i.e. mœn(ib)us.

⁹ The following inscription belongs to this period: the slab on which it is cut, broken in two and defaced with plaster, is now immured above a house door in Methone: 'A.D. MDCLXXXVIII die xv | Augusti [M] V. | Hoc sacellum, dicat[um] B[ea]t[ae] Virgini Mariae de | Salute Prot(e)c(tr)ei no[st]rae, const[r]uctum fuit || ad a[ug]endam milita[ri]um devocione(m)

ex | jussu ill(ustrissi)mi et exc(ellentissi)mi P[ro]v[isor]i? Donati Provisor(i)s | Extr(aordinar)ii huius civ[itatis], ho(minis?) praestantis(si)mi | et vigilant(i)s(si)mi, et ad [p]oster(itatis) memoriam.'

¹⁰ Just below the relief of a winged lion shown at the extreme left of Blouet's engraving (Pl. 12, Fig. 1).

But these efforts were in vain, for in 1715 the Turks once more seized Modon, which they held down to the time of the Greek Revolution, when it was captured by the French under General Maison in 1828.

III.—*Korone (Coron).*¹¹

The town of Korone lies on the northern slope of the spur on which rises the famous medieval fortress of Coron¹²: to the E. there runs out into the Gulf a small headland, called *Λιβαδιά*, the flat top of which is under cultivation but uninhabited. Within the fortress walls are still a number of inhabited houses, though the greater part of the area is occupied by gardens and small fields. The walls and towers were built more solidly than those of Modon, but the depredations made in the search for building stones have been severe.

Boblaye (p. 112) speaks of a Roman tower and ruins inside the city, while the headland already referred to has a number of cisterns and the remains of walls and a staircase of Roman date, along with an immense accumulation of sherds. Marble fragments are very frequent in the fortress walls, and I was able to copy several inscriptions hitherto unpublished. One of these seems to point to a cult of Asclepius (No. 2), and in connexion with this may be mentioned a small bearded head (ht. 115 m.) of white marble, found on the sea shore immediately S.E. of the fortress, which seems to represent either Zeus or Asclepius. The workmanship is rough, but not bad: heavy locks of hair fall over the forehead and down the sides of the head; the lips are slightly parted so as just to show the teeth between them. A large base within the citadel once bore a statue of Septimius Severus erected in 194 or 195 A.D. (No. 3), while a fragment of white marble contains a few items of the Edict of Diocletian in a Greek version (*J.H.S.* xxiv. p. 195 foll.). There are reports of inscriptions and marbles found at a spot (*θέσις Ζάγκα*) to the S. of the fortress, showing that the shores of the Bay of Memi were inhabited in antiquity: unfortunately only two of these were forthcoming on my visit, both very late and fragmentary (Nos. 4, 5). Immediately beyond the fortress on the W. lies the eminence called *Tabouri* or *Bourgos*,¹³ in which are many tombs cut in the rock, a rock-cut cistern and traces of an ancient or medieval road. To the N.W., about three-quarters of a mile from the town, many tombs have been found: one of these,¹⁴ opened about thirty years ago, contained 'a skeleton with the hands folded on the breast, on which lay a lump of unworked bronze'; on one wrist was a gold bracelet,

¹¹ To avoid confusion as far as possible, I write the ancient *Κορώνη* (mod. *Petalidhi*) *Corone*, the modern *Κορώνη* (Coron) *Korone*. Matters are still further complicated by the fact that the modern deme, which has *Petalidhi* as its capital, is also called *Κορώνη*.

¹² For plans of the fortress and an account of its history down to the capture by Morosini in

1685 see Coronelli, *Description de la Morée*, p. 30 foll.

¹³ This name seems to be a survival of the Italian *Borgo* (see Coronelli's plans): the term *Purgo* given to this hill-top by Leake (p. 436) and Frazer (p. 449) is unknown.

¹⁴ At the *θέσις Παραγίτσα, περιφέρεια Ἀγίου Δημητρίου*.

afterwards melted down into a ring still worn by the finder, while above the head was the epitaph (No. 6), proving the interment to belong to the second or third century A.D. and to be that of a priestess. A little way to the north of this spot is a chapel of Ἅγιος Δημήτριος, presumably the same where Pouqueville (*Voyage de la Grèce*, vi. p. 60) found a fragmentary Greek inscription and two Venetian epitaphs: the chapel is now plastered and whitewashed, and no trace of inscriptions remains. A large fragment of a white marble statue and a torso (ht. .36) now preserved in the *δημαρχεῖον* were found on the beach below the N. wall of the fortress, and have almost certainly fallen down from the height above, which in antiquity was doubtless the acropolis.

All these indications point to a city of considerable size and importance as having occupied this site in antiquity, and we may safely follow Boblaye (p. 112), Leake (*Peloponnesiaca*, p. 195), Curtius (p. 167), Bursian (p. 174), and Frazer (p. 449) in identifying it with Asine, a town which in ancient times gave its name to the Gulf as Coron has done during and since the Middle Ages. This agrees with the data given by the *Tabula Peutingeriana* (15 miles from Modon, 30 from Messene), and with Pausanias' statement of its distance (40 stades) from Colonides, which we shall see reason to place at Kastelia-Vounaria. The only difficulty is that caused by Pausanias' remark that it is 40 stades distant from Acritas: this led Leake (p. 443) to place Asine about halfway between Coron and Cape Gallo, which lie about 80 stades apart: later, however, as we have seen, he discarded this view, and all who have traversed the coast south of Coron are unanimous that no traces of a Hellenic settlement are to be found on it. It seems probable that by Acritas Pausanias means Ἅγιος Δημήτριος, the highest point of the mountain (1667 feet) of which Cape Gallo is the southernmost spur. Bory's identification of Asine with the site on the W. coast of the peninsula where the French expedition discovered considerable Roman remains (Bory, p. 316: see Blouet, p. 15 and Plate 16) does not require refutation.

The Asinaeans, Pausanias tells us, were Dryopes who originally lived in the neighbourhood of Parnassus: they subsequently inhabited Asine in the Argolid, whence they were driven by the Argives, and received from the Lacedaemonians a home on the Messenian Gulf; probably the ancient name of the town was Rhium (Curtius, p. 168). They had a temple of Apollo and a sanctuary and ancient image of his son Dryops. When Asine received the name Corone and what caused the migration of the Coronaeans to this new home we cannot tell. Hierocles (647, 16) still distinguishes between Κορωνία and Ἀσίνη, but in the thirteenth century the change has been made, and Asine is replaced by Korone.

IV.—Kastelia-Vounaria.

There is evidence that the coast N. of Asine was inhabited in antiquity. A little distance to the N. of the hamlet of Ἁγία Τριάδα the path crosses

and has destroyed the edge of a mosaic floor, said to have a pattern (*κάτι σχέδια*) on it and to be composed of *tesserae* of ten colours: those which I saw in the small exposed surface were white, light red, and dark red. Close by is a tomb built of large, roughly-cut slabs: the largest measured 1.5 × .6 × .13 metres, and is said to have been even longer when found, but to have been subsequently broken. In the church of "Ἅγιος Βασίλειος at Κόμποι I was shown an ornate stele of hard white limestone with an epitaph (No. 7) and a smaller uninscribed one with acroteria; both of these were found in the ruins of a chapel near the village.

Close to the sea shore some five miles N. of Korone are two striking eminences. The southern one is the higher, and rises to a sharp rocky peak crowned with a chapel of "Ἄγ. Ἡλίας: that on the N. is less steep, has a flatter top, near which stands a chapel of "Ἄγ. Ἰωάννης, and is locally known as Γούλα or Γουλέ. On the western, or landward, side of these hills lies the village of Kastelia, and, somewhat S.W. of it, Vounaria. In 1886 a severe earthquake wrecked the former, and a considerable proportion of its inhabitants moved down to the plain immediately to the N. and there, close to the sea shore in a more convenient and better watered position, founded the village of Kandianika or, to give it its official title, New Korone. Half a mile further N. runs the river of "Ἄγ. Ἀνδρέας, with a hamlet of the same name slightly beyond it on the shore. This serves as a port for Longá, the capital of the deme, which lies well up on the hill-side to the N.W.

Leake refers (p. 438) to Kastelia as an ancient site, but did not himself visit it: Boblaye (p. 111) speaks of various fragments of architecture and sculpture as found 'sur le sommet de la colline de Kastélia.' I was shown a gravestone from the seaward side of "Ἄγ. Ἡλίας (No. 8), and discovered in the earth at the eastern foot of Γούλα a flat, circular 'loom-weight' of reddish clay (diam. .11 m.) pierced with two holes near the edge, and a fragment of a catalogue of *ephebi* (No. 9). This seemed to have fallen from above in one of the small landslips which frequently take place there, since the hill is composed of earth and the sea appears to be rapidly encroaching on it. Another inscribed fragment, probably belonging to the same stele, had been found at the same spot a few days previously, but had in the meantime been washed away by the waves. On the S.E. slope of "Ἄγ. Ἡλίας ancient tombs have been found. I saw one or two vases which came from this spot, and a terracotta representing a woman carried on the back of a silenus.

The remains of late Roman or medieval buildings are considerable. On the N.E. slope of Goula are the ruins of a tower built of stones and mortar with large ashlar blocks at the quoins. Higher up is the mouth of a passage with plastered walls running into the hill: twenty years ago, I was told, it could be followed by a man walking upright for ten or twenty metres, but it has now fallen in and is blocked with earth and stones. On the top is a tower, about ten yards square, now entirely ruined, and just below is a vaulted chamber, originally consisting of two stories: its roof, which is on the ground

level, is pierced with a skylight, and there is an entrance facing the sea, hidden and protected by a small forecourt.

Pausanias' account of his route from Corone (Petalidhi) to Asine (Coron) is in outline as follows: 'Ἐκ Κορώνης δὲ ὡς ὀγδοήκοντα σταδίου προελθόντι Ἀπόλλωνός ἐστιν ἱερὸν πρὸς θαλάσσην (§ 7) . . . τῇ Κορωναίων δὲ πόλει ἐστὶν ὄμιρος Κολωνίδες . . . κείται δὲ τὸ πόλισμα αἱ Κολωνίδες ἐπὶ ὑψηλοῦ μικρὸν ἀπὸ θαλάσσης (§ 8) . . . Κείται δὲ ἐπὶ θαλάσση [Ἀσίνη] . . . σταδίων δὲ τεσσαράκοντά ἐστιν ἐκ Κολωνίδων εἰς αὐτὴν ὁδός (§ 12). In this narrative we miss all reference to the distance separating the Apollo temple from Colonides: we may fairly conclude that they were not far apart, a supposition borne out by the fact that Asine is really about 120 stades from Corone, the sum of the distances, as given by Pausanias, from Corone to the Apollo sanctuary and from Colonides to Asine. Again, the boundary is mentioned in such a way that we must suppose the sanctuary to have been within the territory of Corone, but close to that of Colonides. Now most topographers (Leake, p. 445, Blonet, p. 15, Bory, p. 326, the French Map of 1852, and the Austrian Staff Map of 1885) have placed Colonides at Korone (Coron), which is inadmissible as robbing us of the sole possible site for the important town of Asine, and removing Colonides about forty stades from the Apollo sanctuary, which is by these topographers placed at or above Kastelia. Boblaye's view (p. 112) that Colonides lay near the W. coast of the peninsula at Grizi may also be dismissed as violating the data of the problem. We are left (Frazer, p. 449) with two theories, that of Leake (*Peloponnesiaica*, p. 196) and Bursian (p. 173) which places Colonides at or above Kastelia and the Apollo sanctuary a little further N., perhaps near the river of "Αγ. Ἀνδρέας, and that of Curtius (p. 167), who retains the site above Kastelia for Apollo¹⁵ and sets Colonides near it but a little further inland. Of these two I accept the former, especially as I was told of 'houses with *πιθάρια*' and squared blocks of marble found in two adjacent fields near the left bank of the "Αγ. Ἀνδρέας river, which may well have been in ancient times the boundary between Corone and Colonides, as to-day it divides the demes of Αἴπεια and Κολωνίδες. It is true that the distance from Petalidhi is less than eighty stades, but we may notice that Pausanias expressly qualifies the number by a ὡς, and if Heberdey¹⁶ is right in supposing that Pausanias sailed along this coast rather than traversed it on land, such a mistake is all the more intelligible. Colonides would then be just about the required forty stades from Asine and would be well described as 'on a height a little way from the sea': these are just the two points that most strike the traveller who approaches from the north, the rapid rise from the plain of Kandianika to the villages of Kastelia and Vounaria, and the fact

¹⁵ In his map of Messenia, however, Curtius has followed a suggestion of Boblaye, and has placed the Apollo temple considerably N. of Kastelia. In his note No. 41 (p. 195) we should of course read 'Drei Viertel wegs von Petalidi

bis Kastelia' for 'Drei Viertel wegs von Coron bis Kastelia.'

¹⁶ *Die Reisen des Pausanias* (Vienna, 1894), p. 65 foll.

that between them and the sea lie the eminences of "Αγ. Ἡλίας and "Αγ. Ἰωάννης, so that to reach the shore the inhabitants must descend into the plain to the N. of the villages. But I admit that this explanation has difficulties which can best, perhaps only, be settled by an appeal to the excavator's spade.

V.—*Petalidhi*.

All modern travellers have agreed in placing Corone at the modern village of Petalidhi. Pausanias speaks of it as lying ἐν δεξιᾷ τοῦ Παμίσου πρὸς θαλάσση τε καὶ ὑπὸ τῷ ὄρει τῇ Μαθίῃ¹⁷ (iv. 34. 4), which must be the modern Mt. Lykodhimo (3140 ft.). On the road thither from the mouth of the Panisus is a place on the shore, not yet identified, sacred to Ino, who here emerged from the sea as the goddess Leucothea. Near it is the mouth of the Bias, but we have no means of determining which of the rivers of this coast—the River of Jori,¹⁸ Typhlós, Velíka, Skariás and Jané—bore this name.¹⁹ Corone was held to occupy the site of the Homeric Αἴπεια, and when the Messenians were restored by Epaminondas it was founded by Epimelides of Coronea in Bocotia, who called the place after his native city. His tomb was shown to Pausanias, who also saw at Corone a temple of Artemis 'Child-Rearer,' Dionysus and Asclepius, as well as statues of these two last deities, Zeus Soter and Athena.

Ancient remains are here comparatively numerous,²⁰ though subjected even to-day to sad depredation in the search for building material. The acropolis rises immediately S. of the present village. On the E. and S.E. it falls rapidly, almost precipitously, down to a ravine in which runs a small stream, but on the W. it is united by a saddle with the foothills of Lykodhimo. At this spot, known as Πόρτες, two tombs had been discovered side by side a few days before my arrival: they were formed of large slabs of limestone, but I was unable to see any of the objects which had been found in them. There are clear indications of the presence of other tombs in the immediate neighbourhood. On the southern and western sides of the acropolis are considerable remains of the foundation-courses of a Hellenic wall, doubtless

¹⁷ This reading seems preferable to the ὑπὸ τῷ ὄρει Τημαθίᾳ of some MSS. and the earlier editors, and to the τῇ Ἡμαθίᾳ proposed by Franz and followed by Kiepert.

¹⁸ Ντζορέϊκα, Ντζορέϊκο ποτάμι, so called from the village of Ντζόρι on its left bank: Leake (p. 396) and Blonet (p. 18) write this name Τζιτζιόρι (Djidjóri, Gigiori).

¹⁹ Blonet (p. 18) identifies it with the Ντζορέϊκα, but without giving his grounds: so also Pouqueville (*Voyage*, vi. p. 55). Curtius (p. 195) speaks of Leake (p. 396) as seeing in the Velíka the ancient Bias; but I cannot find any

such statement in Leake, who, however, erroneously says that the Velíka 'flows into the sea a little to the southward of Petalidhi' (*loc. cit.*). Curtius himself at first (*Bull. d. I.* 1841, p. 43) wrote that the Velíka 'senza dubbio è l'antico Bias,' but afterwards (*Peloponnesos*, ii. p. 164) suggested that 'der Bias ist vielleicht der hentige Djané,' an opinion shared by Frazér (*Map V*).

²⁰ The fullest descriptions are those of Bory (p. 332 foll.), Curtius (*Bull. d. I.* 1841, p. 43 foll.) and Welcker (*Tagebuch*, i. p. 233 foll.).

belonging to the fourth century B.C. Various marble fragments lie about, and in one field is the lowest course of a wall of ashlar masonry, while in another are some rock-cuttings, apparently for a small theatre-like building, perhaps a *βουλευτήριον* or a small theatre. On the N.W. slope are several Roman brick buildings; one with two *exedrae* was perhaps a bath. I saw nothing of the sculptures described by previous travellers, but a large marble head from this acropolis is now in the house of Mr. C. Bebonis at Korone, and in Petalidhi I saw a stele (ht. 76 m.) with a relief of a female figure standing full-face: the upper part, and with it doubtless the inscription, is lost, but the relief is complete.

The second field of discovery is the fertile plain which lies to the N. and N.W. of the Acropolis, and is partly occupied by the northern portion of Petalidhi. This seems to have been the main site of Korone in Roman times, when convenience rather than security became the first consideration. Here various foundations and architectural fragments have been found. One spot is called *Λουτρό* or *Λουτρά* from the remains of a Roman bath; another has the name *Φόρος*, a survival of the Italian *foro* and perhaps indirectly of the Latin *forum*. Several white marble sarcophagi have also come to light here (Curtius, *Bull. d. Inst.* 1841, p. 44 foll.; Le Bas-Waddington, *Mon. Fig.* Pl. 99, 100), and an inscribed herm (No. 11). I was also shown a small sepulchral relief of white marble and the base of a statuette, both found in the northern part of the village: the latter perhaps represented Ganymede and the eagle, though only a human foot and ankle and the talons of a bird are now left.

VI.—Inscriptions.

1. In the ruined church of *Ἀγία Σοφία* in the fortress of Methone (Modon). Block of white marble, originally a stele, converted later into a Byzantine capital. Height 76 m.; breadth 54 m.; thickness 21 m.; height of letters 0.25 m. The inscription ends 32 m. from the foot of the stone.

| | |
|----|---------------------------|
| | ΝΑ ΑΙ ΞΓΙΟΥΛΛ |
| | Υ ΡΩΜΑΙΩΝΓΙΟΥΛΦΙΛΙΤ |
| | ΩΣΡΩΜΑΙΩΝΥΙΟΣΠΑ |
| | ΙΩΝΤΗΣΠΟΛΕΩΣΚΑΙΣΤΡΑ |
| 5 | ΗΓΟΣΤΗΣΛΑΜΠΡΟΤΑΤΗΣΑΡ |
| | ΙΣΙΩΝΠΟΛΕΩΣΚΑΙΑΓΩΝΟΘΕΤΗΣ |
| | ΑΣΤΕΙΩΝΚΑΙΝΕΜΕΙΩΝ |
| | Π ΓΥΜΝΑΣΙΑΡΧΟΣΙΟΥΒΚΑΙΚ̄ΠΟ |
| | Υ ΑΡΜΟΣΙΟΥΒΚΑΙΚ̄ΜΟΥΣΑΙΟΥ |
| 10 | Ν ΓΥΜΝΑΣΙΑΡΧΟΥΚΑΙΠΡΟΣ |
| | ΙΤΟΥΚΑΙΠΑΤΡΟΣΤΗΣΠΟΛΕΩΣ |
| | ΚΑΙΟΙΣΥΝΑΡΞΑΝΤΕΣ |

[γυμ](να)[σί]α(ρ)[χ]ος Γ. Ἰουλ. Α - - -
 [ίερε]ύ[ς]? Ῥωμαίων Γ. Ἰουλ. Φιλιπ-
 -[ίερέ?]_ως Ῥωμαίων νίος, πά-
 (τρ)ων τῆς πόλεως καὶ στρα-
 5 [τ]ηγὸς τῆς λαμπροτάτης Ἀρ-
 (γ)είων πόλεως καὶ ἀγωνοθέτης
 [Σεβ]αστείων καὶ Νεμείων,
 [ύ]π[ο]γυμνασίαρχος Ἰουβ. Καικ. Πο-
 [λ]ύ[χ]αρμος Ἰουβ. Καικ. Μουσαιίου
 10 [νιό]ς γυμνασιάρχου καὶ προσ-
 (τ)άτου καὶ πατρός τῆς πόλεως
 καὶ οἱ συνάρξαντες.

The letters are late in form and careless in execution, while the damaged state of the surface of the stone makes the reading difficult in many places and impossible in some parts of the left margin.

This is probably the last part of an inscription on a statue base, of which the opening lines, containing the name of the person honoured, are now lost. The statue is erected by the gymnasiarch, the under-gymnasiarch, and the colleagues of the man commemorated. The gymnasiarch seemingly holds the office of *ἱερεὺς Ῥωμαίων*, a title which I cannot find elsewhere, and occupies a position of distinction. The under-gymnasiarch, Iuventius Caecilius Polycharmus, was probably a young man at the opening of his public career, and no titles are added to his name. The reference to Argos makes it seem that the inscription really belongs to that city rather than to Methone.

2. On a fragment of white marble built upside down into the south wall of the ruined church of Ἀγία Σοφία in the fortress of Korone (Coron).

ΑΝΗΣΑΣΚΛΑΠΙΩ

- - [φ]άνης (Ἀ)σκλ(α)πιώ[ι].

The letters are small and well formed, but the surface of the stone is much damaged.

3. In the fortress of Korone (Coron). On a base of bluish marble. Height .63 m.; breadth .65 m.; thickness not exactly ascertainable, as the stone is partly buried in the ground. The heights of the letters (.03-.039 m.) and the distances between the lines are very variable, but a great effort has been made to secure uniformity of letters in each separate line by means of ruled lines at top and bottom.

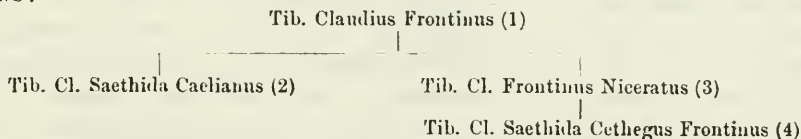
5

ΑΥΤΟΚΡΑΤΟΡΑΚΑΙ
 ΕΑΡΑΛΟΥΚΙΟΝΣΕ
 ΠΤΙΜΙΟΝΣΕΟΥΗΡΟΝ
 ΠΕΡΤΙΝΑΚΑ ΣΕΒΑΣΤΟΝ
 ΗΠΟΛΙΣΤΟΝΑΝΕΙΚΗ
 ΤΟΝΕΠΙΦΛΑΒΙΟΥ
 ΣΑΙΘΙ/ΛΛΟΓΙΣΤΟΥ
 ΚΑΙΓΡΑΜΜΑΤΕΟΣ
 ΑΙΛΙΟΥΦ/ΙΝΙΔΟΥ

Αὐτοκράτορα Καί-
 σαρα Λούκιον Σε-
 πτίμιον Σεουήρον
 Περτίνακ(α) Σεβαστόν
 5 ἡ πόλις τὸν ἀνείκη-
 τον ἐπὶ Φλαβίου
 Σαιθί(δα) λογιστοῦ
 καὶ γραμματέος
 Αἰλίου Φ..ινίδου.

The Emperor Lucius Septimius Severus reigned from 193 to 211 A.D., when he died at York. The absence of the titles Arabicus Adiabenicus, which he assumed in the summer of 195 (Clinton, *Fasti Romani* i, p. 196), proves that the present inscription falls within the first two years of his reign. Cf. the legend on coins of 193 and 194 A.D. (Eckhel vii, 166-171), *Imp. Cae. L. Sep. Sev. Pert. Aug.*, of which the title in the inscription is an exact translation.

The name Σαιθίδας is an uncommon one. In Le Bas-Foucart 319 (Messene) a certain Τιβ. Κλ. Σαιθίδας Καίλιανὸς ὁ ἀρχιερεὺς (τῶν Σεβαστῶν) διὰ βίου καὶ Ἑλλαδάρχης is mentioned as defraying the cost of a statue of the Emperor Marcus Aurelius in 139 A.D. His *stemma* is as follows:



(1) *Consul suffectus* (year unknown): ?Julian. *Dig.* iv. 2. 18.

(2) Le Bas-Foucart 319 (Messene), quoted above; Foucart proposes to restore the name in *C.I.G.* 1396 (Sparta): *C.I.L.* iii. 495 (Messene, 164 A.D.): *C.I.L.* x. 1123 (Abellinum, on the boundary between Samnium and Campania). His *cursus honorum*, Borghesi, *Æuvres complètes* iii. 199 note.

(3) *C.I.G.* 1133 (Argos), 1327 (Sparta): *C.I.L.* iii. 495 (Messene), x. 1122, 1124 (Abellinum).

(4) *C.I.L.* x. 1124 (Abellinum), vi. 16440 (Rome).

Foucart supposes that Tib. Claudius Frontinus married a Messenian lady of the rich and influential family of the Σαιθίδαι (see below), and thus

accounts for the presence of his two sons at Messene, and for the cognomen borne by his elder son and one of his grandsons. Perhaps a second member of the same family married a Roman of the Flavian *gens*. The name *Σαιθίδας*, which is found only in the inscriptions above cited, should probably be restored in Pausanias iv. 32 § 2 * * * δὲ ἐμαντοῦ πρεσβύτερον ὄντα εὑρίσκον, γενομένην δέ οἱ χρήμασιν οὐκ ἰδυνάτω τιμαὶ παρὰ Μεσσηνίων ὑπάρχουσιν ἅτε ἥρωϊ. εἰσὶ δὲ τῶν Μεσσηνίων οἱ τῷ Αἰθίδα χρήματα μὲν γενέσθαι πολλὰ ἔλεγον, οὐ μέντοι τοῦτόν γε εἶναι τὸν ἐπειργασμένον τῇ στήλῃ, πρόγονον δὲ καὶ ὁμώνυμον ἄνδρα τῷ Αἰθίδα. Αἰθίδαν δὲ τὸν πρότερον ἡγήσασθαι τοῖς Μεσσηνίοις φασίν, κ.τ.λ. Hitzig and Blümner, following a conjecture of Foucart, restore *Σαιθίδα*, *Σαιθίδαν* throughout this passage, the name *Αἰθίδας* being unknown.²¹

The Greek word *λογιστής*²² corresponds to the Latin *curator reipublicae* or *civitatis* (Gordian *Cod. Inst.* i. 54, 3 *curator reipublicae qui graeco vocabulo logista nuncupatur*), and is the title given to an imperial officer appointed to superintend the financial administration of one or more cities, or, more rarely, of a province. The date at which the office was instituted is a matter of debate, but it would seem that, save for one or two exceptional cases, the first emperor who attempted in this way to reform the financial mal-administration of the Italian cities, the *civitates liberae* and the towns of the Senatorial provinces was Trajan. The *λογισταί* seem to have been generally appointed for a term of years, and often held this title in conjunction with others, or else a single *λογιστής* undertook the financial oversight of a group of neighbouring communities. Their competence was very wide, extending even beyond the supreme control of all that affected the financial condition of the cities over which they were set: 'wherever necessary they had the right and the duty of interference and of enforcing the will of the sovereign whose delegates they were' (Liebenam, *Philol.* lvi. 315).

In Greece itself we find *λογισταί* at Athens (*I.G.* iii. 1, No. 10 ὁ κράτιστος πρεσβευτής [αὐτῶν καὶ ἀντιστράτηγος] καὶ λογιστής τῆς πατρίδος ἡμῶν), Epidaurus *etc.* (*I.G.* iii. 1, 677 λογιστής κατὰ περ[ρίοδον . . .] Ἐπιδουρίοις, Χαιρω[νεύσι . . .] Κορωνεῦσι, Θηβαίοις), Troezen (*I.G.* iv. 796 τειμηθεὶς λογιστέα ὑπὸ τῆς βασιλείας εἰς δεκαετίαν), and Sparta (*C.I.G.* 1399): *cf.* *I.G.* iii. 1, 631 ὑπατος, πρεσβευτής καὶ ἀντιστράτηγος τῶν Σεβαστῶν, λογιστής καὶ ἐπανορθωτής τῶν ἐλευθέρων πόλεων. Of the islands of the Aegean we find *λογισταί* in Andros (*I.G.* xii. fasc. 5, pars 1, No. 758) and Rhodes (*I.G.* xii. fasc. 1, 83?). In Asia Minor they are found at Aphrodisias (*C.I.G.* 2741 (?), 2790, 2791), Bithynia (*C.I.G.* 4033, 4034 πεμφθεὶς εἰς Βειθυνίαν διορθωτής καὶ λογιστής ὑπὸ θεοῦ Ἀδριανοῦ),

²¹ Frazer retains the name Aethidas, and quotes (note *ad loc.*, vol. iii. p. 434) Leake, *Moraea*, i. 383 foll. 'In the village of *Μανρωματί* I find an inscription in which occurs the name of Aethidas,' *etc.* There is no doubt, however, that Leake misread the inscription (*C.I.G.* 1318, Le Bas-Foucart 319).

²² The Latin term *logista* is found as a translation of the Greek, and therefore only in reference to those who held the office in Greek communities: *e.g.* we have in *C.I.L.* ii. 4114 the same person referred to as *curator civitatis Teanensium* (in Apulia) and as *logista civitatis splendidissimae Nicomedensium*.

Olyzicus (*C.I.G.* 2782 λογιστής μετὰ ὑπατικοὺς δοθεὶς τῆς Κυζικηνῶν πόλεως), Ephesus (*C.I.G.* 2977, 2987 b, Le Bas-Waddington 147 a, *C.I.L.* ii. 4114, Orelli 798), Eumeneia (*C.I.G.* 3886 ἐγλογιστεύσας), Magnesia ad Macandrum (*C.I.G.* 2912 λογιστεύοντος Κρίσπου Ἀσιάρχου), Nicaea (*C.I.G.* 3747, 3748, *C.I.L.* v. 4341), Nicomedia (*C.I.G.* 3771, 3773, *C.I.L.* ii. 4114, v. 4341, vi. 1408, Orelli 798), Cidyessus and Synnada in Phrygia (Head, *Hist. Num.* p. 561, 569), Smyrna (Philostratus, *Vitae sophistarum* i. 19), and Trallès (*C.I.G.* 2926 ὁ ὑπέρτατος λογιστής καὶ κτίστης τῆς πατρίδος): in one case (*C.I.G.* 3497) we find a group of cities under one λογιστής—λογιστὴς Σελευκείας Πειριείας καὶ Ἀλεξανδρείας κατ' Ἴσσον καὶ Ῥωσσοῦ καὶ τῆς τῶν Τραϊανῶν πόλεως καὶ Τροπησίων καὶ τῆς Κολωνείας. The office also occurs in Egypt (*C.I.G.* 5085, 5090, 8610, *Oxyrhynchus Papyri* I. 42, 52, 53, 66, 83-87, *Acta S. Didymi et Theodorae* 304 A.D. ad 28 April) and Syria (*C.I.L.* x. 6006; ? *C.I.G.* add. 4662 b).

For further details regarding the *curatores civitatum* and λογισταί see Henzen, *Ann. d. I.* 1851, 5 foll.; Degner, *Quaestiones de curatore rei publicae pars prior*, Halle 1883; Mommsen, *Röm. Staatsrecht*³ ii. 2. 857, 861, 1082; Marquardt, *Röm. Staatsverwaltung*² i. 162 foll.; Dar.-Sagl. i. 2. 1619 foll.; Ramsay, *Cities and Bishoprics of Phrygia*, ch. x § 6; Liebenam, *Philol.* lvi. 1897, 290 foll.; Pauly-Wissowa, s. v. *curatores* iv. 2. 1806 foll.

The phrase λογιστεύοντος τοῦ δέινος occurs in *I.G.* xii. 5. 758, *C.I.G.* 1399, 2912, 3771, 3773, and ἐπὶ τοῦ δέινος πρεσβευτοῦ καὶ ἀντιστρατήγου τῷ Σεβαστοῦ καὶ τοῦ δέινος τοῦ λαμπροτάτου λογιστοῦ in *C.I.G.* 3747, 3748.

4. On a block of white marble, of which the left margin is preserved. Found in the southern part of the modern town of Korone, and now in a house close to the chapel of Παναγία Ἐλεήστρια. Height .54 m.; breadth .2 m.; thickness .13; breadth of written surface .12 m. The stone seems to have been at some time converted into a Byzantine capital.

Γ' ΑΙΟΞΑΚΥΛ
ΛΗΝΑΣΙΑΡΧ
ΞΑΙΚΑΠ
ΛΕΙ

Γ(ά)ϊος Ἀκυλ[είνος *vel sim.* - - - γυ]|μνασίαρχ[ος - - -

The inscription begins .265 m. from the top of the stone: the letters are late in form and careless in execution.

5. On a marble fragment in a field S. of the fortress of Korone. Height .2 m.; breadth .17 m.; thickness .315 m. Parts of the top and left edges are preserved. The surface is almost entirely destroyed, and the reading of several of the letters is uncertain. Height of letters *ca.* .015 m.; slight apices.

ΟΥ
 NCIT
 ΠΡΩΤΟ
 ΟΙΣΕΨΟ L. 3 πρωτο - -, L. 5 ? [κ]οινοῦ,
 5 ΟΙΝΟΥ L. 8 μέχρι.
 ΨΙΕΑΓ
 ΟΝΛΙΚΙΜ
 ΜΕΧΡΙΓ

6. On a fragment of a *columella* of bluish marble with slight indications of fluting. Found about $\frac{3}{4}$ mile N.W. of the fortress of Korone (θέσις Παναγίτσα περιφέρειας Ἀγίου Δημητρίου).

| | |
|-----------|--------------|
| ΑΡΧΙΔΩ | Ἀρχιδῶ |
| ΧΡΥΣΙΠΠΟΥ | Χρυσίππου |
| ΙΕΡΕΙΑ | ἱέρεια [διὰ] |
| ΓΕΝΟΥΣ | γένους |

The letters, which are irregularly formed and have prominent *arices*, date probably from the 2nd century A.D.

The name Ἀρχιδῶ does not, so far as I am aware, occur elsewhere. For the term *ἱερεὺς, ἱέρεια διὰ γένους* cf. Collitz-Bechtel 4656 (Messene); *I.G.* xii. 2, 102, 116, (Mytilene); *I.G.* xii. 3, 494, 516, 522 I., 865 (Thera). A further example from Thera is afforded by the famous Testamentum Epictetae (*I.G.* xii. 3, 330 lines 58 foll.), τὰν δὲ ἱερατείαν τὰν Μουσᾶν καὶ τῶν ἡρώων ἔχέτω ὁ τᾶς θυγατρὸς μου υἱὸς Ἀνδραγόρας· εἰ δέ τί κα πάθῃ οὗτος, αἰεὶ ὁ πρεσβύτατος ἐκ τοῦ γένους τοῦ Ἐπιτελείας. At Gythion a similar family tenure of the priesthood of Apollo is granted to Philemon and Theoxenus (Collitz-Bechtel, *Sammlung* 4567 l. 23 foll.): εἶναι αὐτοὺς ἱερεῖς τοῦ Ἀπόλλωνος καὶ ἐγγόνους αὐτῶν αἰεὶ διὰ βίου καὶ εἶναι αὐτοῖς τὰ τίμια καὶ φιλάνθρωπα πάντα ὅσα καὶ τοῖς ἄλλοις ἱερεῦσιν τοῖς κατὰ γένος ὑπάρχει κ.τ.λ. Maeandrius of Samos, to take an earlier instance, in offering to lay down the tyranny stipulates as one condition (*Herodotus* iii. 142) ἱρωσύνην . . . αἰρεῦμαι αὐτῷ τέ μοι καὶ τοῖσι ἀπ' ἐμεῦ αἰεὶ γινομένοισι τοῦ Διὸς τοῦ Ἐλευθερίου, while Telines of Gela executed a successful *coup* ἐπ' ᾧ τε οἱ ἀπόγονοι αὐτοῦ ἱροφάνται τῶν θεῶν ἔσονται (*Herodotus* vii. 153). See also *C.I.G.* 2655 (Halicarnassus) with Boeckh's notes. The priestly families of Athens are discussed in Toepffer, *Att. Genealogie*, Bossler, *De gentibus et familiis Atticae sacerdotalibus*, Martha, *Les Sacerdotes Athéniens*, etc. In Ἐφημ. Ἀρχαιολ. 1892, p. 24 (Amyclaeum) διὰ γένους and κατὰ γένος occur side by side with the same meaning. Cf. *C.I.G.* 1353, 1355.

7. Found in a ruined chapel near the village of Κόμποι in the deme Colonides, and now preserved in the church of Ἅγιος Βασίλειος. On an ornate stele of white limestone with pediment and acroteria. Height .82 m.; breadth .45 m.; thickness about .065 m.



ΟΝΑΣΙΩΝ ΜΥΡΤΙΣ ΧΑΙΡΕΤΕ

Ὀνασίῳ, Μύρτις, χαίρετε.

The letters are clearly and carefully inscribed, and belong to the first or second century B.C. The whole stele is in an excellent state of preservation.

The name Ὀνασίῳ occurs at Sparta (*C.I.G.* 1368), Berenice in Cyrenaica (*C.I.G.* 5361), Aegosthena (*I.G.* vii. 209), Paros (*I.G.* xii. 5, pars 1, 232) and Rhodes (*I.G.* xii. 1, 18).

The gender of the name Μύρτις is doubtful. It was borne by two Argives (Demosthenes xviii. § 365, p. 324, Polybius xviii. 14, Harpocrat. *s.v.*; Theophrastus *ap.* Athenaeus vi. 254d), and also by the celebrated lyric poetess of Anthedon, the instructress and rival of Pindar. It occurs in *I.G.* ii. 3993, 3994, iii. 3291 (Attica), iv. 149 (Aegina), and xii. 1, 626 [?] (Rhodes), but in none of these cases is there any means of determining the gender.

8. Found on the eastern slope of the hill called Ἅγιος Ἡλίας above Kastelia. On a thin stone tablet; length .20 m.; breadth .20 m.; thickness .02 m.

ΕΥΠΛΟΙΑ

ΧΑΙΡΕ

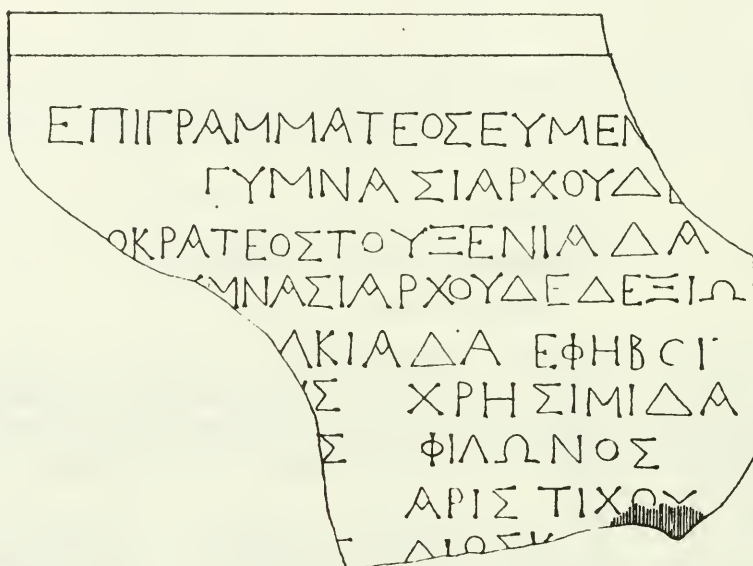
Εὐπλοία, | χαίρε.

To the left of l. 2 a leaf is incised, and below the inscription is a twig with four leaves. The letters are boldly and clearly, if somewhat irregularly, engraved.

The name is a fairly common one: it occurs in Athens (*I.G.* iii. 61 A iii. B ii.; 1280a), Rhodes (*I.G.* xii. 1. 671), Rome (*I.G.* xiv. 1607a; *C.I.G.* 6466), Lycia (*C.I.G.* 4299), etc. (*C.I.G.* 7309, 8514). Εὐπλούς also occurs frequently, and Εὐπλοῖος (*I.G.* xiv. 1936) and Εὐπλοῖων (*I.G.* vii. 3468) are each found

once. *Εὐπλοία* was a well known epithet of the Cnidian Aphrodite (Pausanias i. 1. 3; *C.I.G.* 4443. Cf. Farnell, *Cults of the Greek States* ii. 689).

9. Found on the sea shore at the foot of the hill known as Γούλα above Kastelia. On a fragment of a white limestone stele, of which portions of the upper, right and left hand edges are preserved. Height .195 m.; breadth .27 m.



Ἐπὶ γραμματέος Εὐμεν[ίδα ?]

γυμνασιάρχου δὲ

-- οκράτεος τοῦ Ξενιάδα

[ὑπογυ]μνασιάρχου δὲ Δεξιώ-

5 [νος τοῦ Ἀ]λκιάδα. Ἐφηβοι.

--- ς Χρησιμίδα

--- ς Φίλωνος

---- Ἀριστίχου

--- (ς) Διοσκ[ορίδα ?]

The letters are well and clearly incised, and seem to belong to the second century B.C.

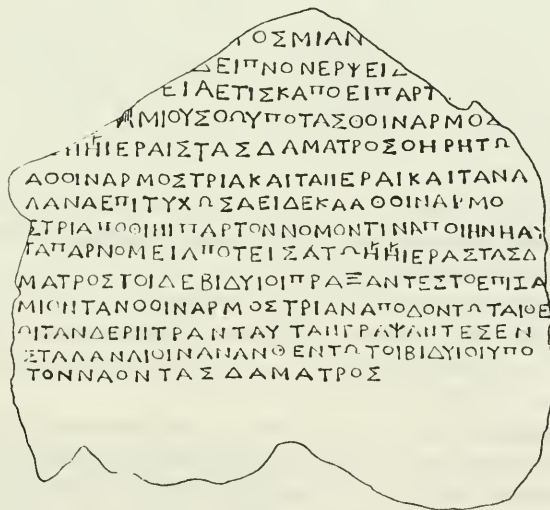
In the first line we must restore Εὐμεν[ίδα] or Εὐμέν[ους]: the space is insufficient for Εὐμέν[ωνος] (*I.G.* iv. 1485, l. 93), and the name Εὐμένιος, borne by the celebrated *rhetor* of Autun, is not found till the third or fourth century A.D. It is not possible to restore the first name in l. 3.: either two or three letters precede the -οκράτεος, but Bechtel-Fick (*Griech. Personennamen*, p. 173-5) give no fewer than twenty-seven names which fulfil this condition. In l. 9 Διοσκ[ορίδα] might be the true reading: the names Διόσκορος (see Pape-Benseler, and add *I.G.* iii. 1160, 1192, 1202, 1267?),

Διοσκόριος (Suidas *s.v.*) and *Διοσκόρας* (*C.I.G.* 1495) also occur, but are very rare. Of the remaining names mentioned in the inscription *Ξενιάδας* occurs at Corinth (*I.G.* iv. 352), while *Ξενιάδης* is the name of two Corinthians (*cf.* Pape-Benseler, *Wörterbuch*): *Δεξιών* is found only in *I.G.* vii. 299²³ and Cicero *in Verr.* act. ii. lib. 5, cap. 42 (where the better supported reading is *Dexo*), and as a title bestowed upon Sophocles after his death (*Etym. Magn. s.v.*): *Ἀλκιῦδας* appears to be unknown, though *Ἀλκιῖδας* (*I.G.* xii. 1. 922) and *Ἀλκιῦδης* (*I.G.* xiv. 5) occur: *Ἀρίστιχος* is found at Thespieae (*I.G.* vii. 1742) and Hyettus (*ibid.* 2816), and *Ἀριστίχα*, *Ἀριστίχη* at Tanagra (*ibid.* 799, 800): *Χρησιμίδας* I cannot find elsewhere, though the name appears in the form *Χρημίδης* in an inscription of Oetylus.

A discussion of the office of the *ὑπογυμνασιάρχος* by M. Glotz will be found in *Dar.-Sagl.* vol. ii. pt. 2, p. 1679 *s.v.* *Gymnasiarchia*, together with a list of the places where the title occurs. To that list must now be added Argos (?) (No. 1 above) and Troezen (*I.G.* iv. 753 *add.* p. 381), while for Thera²⁴ there is the further evidence of *I.G.* xii. 3, 338, 339, 342, 391a, 392A, [395], 517, and for Pergamum that of *Inscr. von Pergamon* 256, 323, 467, 468.

The *γραμματεὺς* of line 1 is probably the *γραμματεὺς ἐφήβων* rather than an eponymous magistrate: in the latter case we should expect the formula *ἐπὶ γραμματέος Εὐμεν[ίδα], γυμnasiάρχου ντος - - οκράτεος κ.τ.λ.*

10. Found near the village of Remoustapha in the deme *Αἴπεια*. On a stele of hard white limestone, of which the upper part is lost. Height .26 m.; breadth .28 m.



²³ According to Lolling's copy: Leonardos (*vol. cit. add.* p. 744) reads *Δέρκωνος*.

²⁴ For Thera M. Glotz quotes *C.I.G.* 2461: this should read 2466 (= *I.G.* xii. 3, 392A).

By a curious coincidence, however, *C.I.G.* 2461 as restored by Hiller von Gaertringen in *I.G.* xii. 3, 517 does mention the *ὑπογυμνασιάρχος*.

- - [εὐ](κ)οσμίαν? - - - -
 - - - δείπνον ἐρψείῃ δ - - - -
 - - - εἰ (δ)έ τίς κα ποεῖ παρ τ[ὸν νό]-
 [μον ζα]μιούσθω ὑπὸ τῆς θοιναρμοσ[τρί]-
 5 [ας] ἥῃ ἱεραῖς τῆς Δάματρος, (θ)ηρήτω [δὲ]
 ἁ θοιναρμόστρια καὶ ταὶ ἱεραὶ καὶ τὰν ἁ[λ]-
 λῶν ἁ ἐπιτυχῶσα, εἰ δέ κα ἁ θοιναρμό-
 στρια ποθιῇ παρ τὸν νόμον τινὰ ποιῇν ἢ α[ὐ]-
 τὰ παρνομεῖ ἀποτεισάτω ἥῃ ἱερὰς τῆς Δ[ά]-
 10 ματρος, τοὶ δὲ βίδυιοι πράξαντες τὸ ἐπιζά-
 μιον τὰν θοιναρμόστριαν ἀποδόντω τῇ θε-
 ῶν τὰν δὲ ῥήτρην ταύτην γράψαντες ἐν
 στάλαν λιθίναν ἀνθέντω τοὶ βίδυιοι ὑπὸ
 τὸν ναὸν τῆς Δάματρος.

The letters are small, but carefully engraved, and point to the latter part of the third or the first half of the second century B.C. as the date of the inscription. The forms of the ΑΙΘΩ are earlier than those of the Andania mystery-inscription (*ca.* 91 B.C.), where they appear as ΑΖΘΩ. The letters ΘΩΠΩ are considerably smaller than the rest: of this dwarfing of Π I know no other example.

We have here the close of a document regulating the observance of the sacred feast (δείπνον l. 2) at a Demeter temple of the existence of which we first learn from the present inscription. All infringement of the rules is to be punished by a fine of 200 drachmas, which are to go into the sacred treasury. The *thoinarmostria* passes sentence, which she also executes in conjunction with the *ἱεραί* and anyone else who happens to be present: if, however, she is privy to the offence or is herself the offender, the exaction of the fine devolves upon the *βίδυιοι*, who are also entrusted with the duty of having a copy of the ordinance engraved in stone and set up below the temple of Demeter.

L. 1 We may perhaps restore [εὐ](κ)οσμίαν: *cf.* the Andania inscription already referred to (Collitz-Bechtel 4689), l. 39, where a chapter is entitled ἀκοσμούντων.

L. 2 Δείπνον *cf. loc. cit.* l. 95 ἱεροῦ δείπνον.
 Ἐρψεί Dor. future of ἔρπω. The word is frequently used in a ceremonial sense, *e.g.* C.I.G. 2554 l. 77; 2556 l. 33, 35, 38: I.G. iv. 951 l. 79, 86.

L. 4 Θοιναρμόστρια, 'the mistress of the banquet.' The word occurs elsewhere only in C.I.G. 1435, 1436, 1439, 1446, 1451 [= Collitz-Bechtel 4522];²⁵ Collitz-Bechtel 4689 l. 32; and in an unpublished inscription from Kalyvia Sochas (near Sparta). In the first two cases it is spelt *θυναρμόστρια* (*cf.* *Θύναρχος* I.G. vii.

²⁵ Meister's restoration *θοιναρμόστριαν εἰς* at the end of l. 4 are perfectly plain on the [Δα]λ[ας] must be abandoned, as the letters ΑΡ stone.

1098, 2721, etc.), in the last it appears as *σειναρμόστρηα*.²⁶ It may be shown, I think, with considerable probability that the title occurs only in connection with the worship of Demeter and Cora. The unpublished inscription referred to is a dedication to these goddesses; in Collitz-Bechtel 4689 the reference is expressly to *ἡ θοιναρμόστρηα ἡ εἰς Δάματρος*, and our present inscription plainly refers to the Demeter cult. This leaves us with *C.I.G.* 1435, 1436, 1439, 1446, 1451. Now

(1) *C.I.G.* 1435, 1436, 1439 occur in a group of inscriptions copied by Fourmont 'Στῶ Σκλαβοχωρίῳ in templo (1438, *prope templum*) Apollinis,' and consisting of *C.I.G.* 1402, 1407, 1434-39, 1443.²⁷ That these were all found together is confirmed by their homogeneous character: all are honorary inscriptions on the bases of statues, and of the nine statues seven were certainly, all probably, those of women. Since, then, three of these (1402, 1439, 1443) have been rediscovered at Kalyvia we are naturally led to see in Fourmont's 'templum Apollinis' the church of 'Αγία Σοφία at Kalyvia, or some site close by from which its stones were taken. But the late Dr. von Prott adduced strong reasons²⁸ for identifying this site with the 'Ἐλευσίνιον referred to by Pausanias (iii. 20, 7). He speaks of 'Weihungen an Demeter und Kora' (presumably the unpublished inscription above cited and *C.I.G.* 1434), 'die einmal ausdrücklich als 'Ἐλευσίνια bezeichnet werden' (Tsountas, 'Εφ. Ἀρχ. 1892 p. 26 No. 9). The probability seems to me to gain strength from the fact above noticed that seven of the nine inscriptions from the site copied by Fourmont—and, we may add, two of the three added by Tsountas, *loc. cit.*—are certainly in honour of women.

(2) *C.I.G.* 1446 was found by Fourmont 'στῶ Βίτζα.' Where this is I do not know, but it is noteworthy that the inscription from l. 5 to l. 18 reproduces word for word one found at Kalyvia (Tsountas, *loc. cit.* p. 25 No. 8), and the two must therefore refer to the same woman, Κλαυδία Δαμοσθένεια Πρατολάου,²⁹ who is expressly referred to as *ἱέρεια Κόρας*.

(3) *C.I.G.* 1451 was copied by Fourmont 'Στῶ Σκλαβοχωρίῳ *prope templum Ongae*.' It also is now at Kalyvia. The refer-

²⁶ For the representation of θ by σ in Laco-
nian inscriptions cf. ἀνέσθηκε (Collitz-Bechtel
4500), σίν (=θεόν, *ibid.* 4444, l. 51), and various
names with initial Σε-, Σι- (=θεο-, *c.g.* Σε-
μήδης, Σείτειμος, Σιδέκτας, Σίπομπος, etc. Per-
haps to a false analogy is due the εἰ of *σειναρ-
μόστρηα*.

²⁷ In *C.I.G.* 1443 one line has been omitted:
after l. 5 we should read

ΔΕΞΑΜΕ

ΛΟΜΑΠ

-ΟΥ/

[προσ][δεξαμέ][νου τὸ ἀνά][λωμα Πο(πλίου)...]
(τ)οῦ (ἀ)[υδρός].

²⁸ *Athen. Mitteil.* xxix. 1904, p. 7 foll.

²⁹ The [CC] in Tsountas' first line is certainly,
I think, to be restored [Κλαυ. Δσ]μοσ[θέειαυ]
Πρατολάου].

ence to $\acute{\alpha}$ εἰς τὰς θεὰς εὐσέβεια leads us *a priori* to connect the woman named in it with the cult of Demeter and Cora.

Since we have thus connected the title of *θουαρμόστρια* with the worship of these two goddesses, we may argue inversely that since the term is found in four (*C.I.G.* 1435, 1436, 1439 and the unpublished text) or possibly five (? *C.I.G.* 1451) inscriptions from Kalyvia and must be restored in a sixth (Tsountas, *Ἐφ. Ἀρχ.* 1892, p. 25, No. 8), the source from which those stones were derived is very probably the *Ἐλευσίνιον*.

- L. 5. γ is a modification of \vdash , the usual sign for drachma in Attic³⁰ inscriptions: it recurs at Cnidus (*Brit. Mus.* No. DCCXCV) and Thera (*I.G.* xii. 3. 327 l. 14 *corrigenda*). At Lindus the sign \angle is found (*Brit. Mus.* CCCLVIII), and \times at Pergamum (*Inscr. von Perg.* 374 D 7): this latter sign usually denotes the *denarius*, which was equal in value to $1\frac{1}{3}$ Asiatic drachmas, and is so used in the inscription cited (B 22, 25, C 13, D 5, 9).

θηρήτω = *θηραέτω*, the contraction of $\alpha + \epsilon = \eta$ being Doric (Boisacq, *Dialectes Doriciens* p. 64 foll.): '*nachjagen* (*verfolgen*).' For this explanation I am indebted to Prof. U. von Wilamowitz. Cf. the term 'pursuer' in Scotch law. There is no room on the stone for the *θηρήτω[σαν]* which we would expect.

- L. 6. We must probably write *ἱεραί* rather than *ἱεραῖ*, and identify these officials with the *ἱεραί* of the Andania inscription (cf. Le Bas-Foucart, *Explie.* No. 326a, p. 168): they are sharply distinguished from the priestesses (*ἱέραι*), as the *ἱεροί* from the *ἱερείς*.

From the use of the feminine *τῶν ἀλλῶν ἡ ἐπιτυχῶσα* we may conclude that only women were admitted to the sacred banquet: cf. Collitz-Bechtel 4495 l. 10, *ἄρσης δὲ οὐδεὶς παρέσται*. Freiherr Hiller von Gärtringen has suggested to me that the occasion may have been a *Thesmophorienfest*. Cf. Aristoph. *Thesmophor.* 1150, *οὗ δὲ ἀνδράσιν οὐ θεμιτὸν εἰσορᾶν ὄργια σεμνὰ θεαίν*, and *ibid.* 655 foll.

- L. 8. *Ποθιῆι* = *προσιῆι*: I do not know a parallel for this use of the active of *προσίημι*, though in the middle it often = 'allow,' 'approve.'
- L. 10. *Βίδυιοι*. The title occurs elsewhere only at Sparta to denote the five annual officers who acted as overseers of the youths. It is written *βίδεοι* or *βίδυοι* in Laconian inscriptions, *βιδιαῖοι* in Pausanias (iii. 11, 2; 12, 4), *βείδιοι* in *Anecd. Oxon.* ii. 290, Suidas, Eustath. and Phavorinus, and *βειδιαῖοι* in Fourmont's spurious inscriptions. The spelling here used, *βίδυιοι*, does not

³⁰ It is also found in Thera (*I.G.* xii. 3, 327, l. 144). In papyri various signs are used,

\vdash \angle 3 \int S ζ ζ

elsewhere occur, but is etymologically the correct one, the word being connected with ἰδῦντοι *i.e.* *Φιδῦντοι*, 'witnesses.' The digamma is here, as often in Laconian inscriptions, represented by β; *cf.* Müllensiefen, *De tit. Lacon. dialecto* p. 47 [177] foll.

- L. 12. Ἐν. This is the first certain instance of ἐν = εἰς in Doric. 'A Dorcensium usu alienum' (Van Herwerden, *Lec. Dialect.* s.v.). Ἐν ἐφόδιον was read, though somewhat doubtfully, by Foucart (Le Bas-Foucart 157a l. 50), but rejected by Mylonas (*B. C. H.* 1894, p. 143). Meister restored ἐ[ν] τὸν αἰῶνα (Collitz-Bechtel 4560 l. 4), but afterwards altered this to ἐ[ς] τὸν αἰῶνα (*ib. Nachwort*, p. 146). The present instance, however, admits of no doubt.

11. In Petalidhi on a white marble herm found to the north of the village, now preserved in the courtyard of the house of Βασίλειος Γ. Μοκάκος. Breadth .30 m.; thickness .225 m.; height (without head) 1.83 m. Published in minuscules only by W. Kolbe, *Sitzb. d. Berl. Akad.* 1905, p. 53.

ΑΔΕΜΕΤΕΙΧΙΟΕΣ
 ΣΑΠΑΡΑΓΛΑΟΝ
 ΙΡΟΝΙΘΩΜΗCΜΕC
 CΗΝΗΞΥΝΟΙC
 ΚΥΔΕCΙΝΗΓΛΑΙ
 CΕΝΥΙΟΝΑΡΙCΤΩ
 ΝΟCΜΕC CΗΝΙΟΥ
 ΗΔΕΡΑΤΕΙΝΗC
 ΑΓΗΤΑC CΨΑΡΤΗΝ
 ΗΛΑΧΕΝΕΚΤΑΤΕ
 ΡΩΝΦΑΜΕ ΔΕΕΛ
 ΑΛΑΝΕC CΙΓΕΝΟΥC

phallus

ΜΕΓΑΚΥΔΟCΑΡΕ
 CΟΑΙΕΚΤΕΔΙ <
 ΟCΚΟΥΡΑΝΕΚ
 ΤΕΚΑΙΗΡΑΚΛΕ
 ΟΥC

ΤΟΝΗΡΑΚΛΕΙΔΗΝ
 ΑΡΜΟΝΕΙΚΟΝ
 ΗΠΟΛΙC

- Ἄδε με τειχιόεσ|σα παρ' ἀγλαὸν| ἱρὸν Ἰθώμης
 5 Μεσ|σήνη ξυνοῖς|| κύδεσιν ἡγλαί|σεν
 υἱὸν Ἀρίστω|νος Μεσσηνίου| ἡδ' ἐρατεινῆς|

- 10 'Αγήτας, Σπάρτην|| ἡ λάχεν ἐ(κ) (π)ατέρων·
 φαμέ[ν] (δ)ἐ 'Ελλάνεσσι γένους| μέγα κῦδος ἀρέ[σ(θ)αι
 15 ἔκ τε Δι||οσκούρων ἔκ| τε καὶ 'Ηρακλέ|ους.]
 20 τὸν 'Ηρακλείδην| 'Αρμόνικον|| ἡ πόλις.

The letters are large (average height .025 m. in the epigram, .02 m. in the subscription) and, though irregular, show signs of careful engraving. They belong most probably to the second century A.D.

'This wall-girt Messene, hard by Ithome's glorious sanctuary, with public honours glorified me the son of Messenian Ariston and lovely Ageta, whose ancestral home was Sparta: and we tell the Greeks that we have won great honour of race both from the Dioscuri and also from Heracles'

The name of the man commemorated, being unsuited to elegiac verse, was added in an iambic senarius: the same expedient is resorted to in Kaibel, *Epigr. graec.* 751, 886. The reference to Messene and the absence of any mention of Corone make it highly probable that the stone was originally set up at Messene. A Publius Aelius Harmonicus was honoured by the Messenians with a statue erected at Olympia (Collitz-Bechtel 4659), and the name is frequently found at Sparta, usually with the names Tiberius Claudius prefixed (Collitz-Bechtel 4481; Le Bas-Foucart 173*a*, 176; *C.I.G.* 1249 col. iv, 1260, 1346; Sparta Cat. No. 432). A Claudia Ageta is found at Amyclae (*Brit. Mus.* cxlii.) and Memmia Ageta at Sparta (Collitz-Bechtel 4479). The claim to be descended from Heracles and the Dioscuri often finds expression in Laconian inscriptions, *e.g.*, Le Bas-Foucart 174, 245; *C.I.G.* 1353, 1355; 'Εφ. 'Αρχ. 1892 p. 24. In two cases descent is traced from the Dioscuri alone (Le Bas-Foucart 245*b*; *B.C.H.* xxi p. 209), in one from Poseidon (*C.I.G.* 1374).

12. Petalidhi (Corone), in the house of Dr. D. Marcopoulos. Upper part of a stele of hard white limestone. Height .5 m.; breadth .43 m.; thickness .1 m. The inscription begins .28 m. from the top of the stone.

| | | |
|---|-----------|------------|
| | ΑΓΑΘΩΝ | ΑΓΑΘΟΚΛΗΣ |
| | ΔΑΜΑΡΧΟΣ | ΕΠΙΓΕΝΗΣ |
| | ΝΙΚΩΝ | ΚΛΕΩΝ |
| | ΕΠΙΤΕΛΗΣ | ΛΥΣΙΔΑΜΟΣ |
| 5 | ΠΟΛΩΝ | |
| | ΑΡΜΟΔΙΟΣ | |
| | 'Αγάθων | 'Αγαθοκλῆς |
| | Δάμαρχος | 'Επιγένης |
| | Νίκων | Κλέων |
| | 'Επιτέλης | Λυσίδαμος |
| 5 | Πολων | |
| | 'Αρμόδιος | |

The letters are well and carefully formed : the *hastae* are thickened considerably at the ends, terminating in rudimentary *apices*. The character of the writing and the absence of Roman names seem to point to the first half of the second century B.C. as the date of the inscription.

13. Petalidhi (Corone), built into the wall of the house of Δ. Κουτσοδημητρόπουλος. Large limestone slab : height '63 m.; breadth '53 m.; thickness '1 m. The inscription has been published by Koumanoudes ('Αθήναιον iv. p. 104), Petrides (Παρνασσός v. p. 907), and Meister (Collitz-Bechtel 4683). I repeat it here because the only copy that has appeared in uncials, that of Petrides, is rightly characterised by Meister as 'sehr mangelhaft.'

Α Γ Α Θ Α Ι Τ Υ Χ Α Ι

ΕΠΙΓΡΑΜΜΑΤΕΟΣ ΤΩΝ ΣΥΝΕΔΡΩΝ ΝΙΚΑΤΟΡΟΥ
ΤΟΥ Δ[Ι]ΟΚΛΕΙΔΑ ΤΟΥ ΣΔΕΟΓ ΟΗΚΟΣ ΤΟΥ ΚΑΙ ΕΝΑΤΟΥ
ΕΠΕΙ ΜΗΝ ΑΚΛΗΘΕΙ

Ἀγαθαὶ τύχαι.

Ἐπὶ γραμματέος τῶν συνέδρων Νικα(γ)όρου
τοῦ Δ[ι]οκλείδα ἔτους δὲ ὀγ[δ]οηκοστοῦ καὶ ἐνάτου,
ἐπεὶ ἀνακληθεῖς - - -

The letters are careless and irregular : those of l. 1 are somewhat larger than those of the succeeding lines. The inscription was never completed.

M. follows K. in reading Νικάτορος in l. 1, but the name is suspicious and P. rightly gives Υ as the last letter of the line. Whether the fifth letter of the name is really a Τ written by an error for Γ or a Γ which resembles Τ owing to a damage of the stone, I cannot decide.

The inscription is dated in 'the eighty-ninth year.' It is uncertain whether the era is reckoned from the defeat of Andrisus (148 B.C.), from the destruction of Corinth (146 B.C.), or from the organization of the province of Achaia (145 B.C.): see Foucart's note on Le Bas-Foucart 116*a* and Meister's on Collitz-Bechtel 4689 l. 10. In any case this inscription belongs to about the year 57 B.C.

MARCUS NIEBUHR TOD.

INSCRIPTIONS FROM THE CYZICENE DISTRICT, 1904.

1. At Panderma : small base, broken, '08 m. across, letters '01.

| | |
|------------|----------------|
| ΗΡΑΚΛΕΙΔΗΣ | Ἡρακλείδης |
| ΗΡΑΚΛΕΙ | Ἡρακλεί- |
| ΔΟΥΘΕΩ | δου θεῶ |
| ΟΛΒΙΩΥΠ | ὀλβίῳ ὑπ- |
| Α-ΑΙ | [ἐρ] |

2. Small fragment of eippus, diam. '11, letters '02.

| | |
|--------------|-----------------------|
| ΟΛΒΙΩ | θεῶ] ὀλβίῳ |
| ΙΤΟΣΛΟΝΓΕΙ | ? Κόιν]τος Λονγεῖ[τος |
| ΙΟΥΠΡΑΓΜΑΤΕΥ |]ίου πραγματευ- |
| Α-Α | τ]ῆς |

3. Pediment (0'24 broad) with radiated bust of long-haired god : below (letters '015):

| | |
|------|-------------|
| ΤΥΧΗ | Ἀγαθῇ] Τύχη |
|------|-------------|

4. Altar with relief of bucranium, letters '015.

| | |
|------|-----------|
| ΘΕΩ | θεῶ |
| ΗΩ | Δ]ὲ ὀλβίῳ |
| ΑΒΙΩ | |
| ΔΙΣΔ | |
| ΑΠΙΡ | |

5. Broken stele (0'15 broad) with relief of Zeus standing, eagle on ground r., letters '015.

| | |
|----------|----------|
| ΤΤΑΛΟΥΑΜ | Ἀ]ττάλου |
| ΑΙ-Α | |

For the type of relief cf. *J.H.S.* xxiv. 22.

6. Block 0·35 × 0·23, used later for capital, letters irregular, about '03.

| | |
|------------|---------------------|
| — I Λ | Δ]ι[ι δ]λ[βίω ? |
| CHKOYWB | εί]σηκό(υ)ω ? β[ω- |
| ΛΟΝΥΠΕΡΙΑ | μόν ὑπὲρ (έ)α[ν- |
| ΤΟΥΚΑΙΒΙΟΛ | τοῦ καὶ βίου |
| ΛΙΤΕΙΛΝC | κ]αὶ τέκνω[ν |
| ΑΙΤ | κ]αὶ τ[ῶν κωμητῶν ? |

Εἰσήκοος may perhaps be used as an equivalent for the common *ἐπήκοος*: the illiterate spelling *εἰσήκουος* is paralleled by *στουάν* for *στοάν* in Ramsay, *C.B.* i. (61).

7. Slab used later for base of two columns, letters distinct and well cut '03-'04.

| | |
|----------|-----------------|
| ΤΑΘΗΤΥΧΗ | Ἄ]γαθῇ Τύχηι |
| ΡΗΛΙΑΝΑ | Ἀὐ]ρηλία Ναι[βι |
| ΝΗΓΑΙ | α]νῇ ? . . . |
| ΗΜΟΝ | |
| ΙΤΩΝΤC | ιτῶν τῶ |
| ΝΥCΩ | Διο]νύσφ ? |

Nos. 1-7 and a corner of a stele with relief of a bull's head are said to have been brought from a village near Gonen.

**Ολβιος* is an uncommon epithet of Zeus (cf. Latyshev i. 24, *J.H.S.* xi. 226 (Cilicia), *C.I.G.* 2017 = *Ath. Mitth.* vi. 264 (Gallipoli)), and may be compared with *Πλούσιος*, *Paus.* iii. 19. 7. It appears not to be necessarily connected either with Olbia (cf. *J.H.S.*, xxiii. 37) or with Olba in Cilicia.

8. Funeral stele with relief of parting '30 × '24, letters '01.

| | |
|-------------|-------------------|
| ΙΩΤΙΧΗΟΝΗCΙ | Ζωτίχη Ὀνησί[μον, |
| ΧΑΙΡ | χαίρ[ε |

I was shewn at Panderma a copy of a stone at Ermeni Keui, reading

ΔΙΕΤΡΕΦΗΣ | ΙΠΓΙΟ

9. Mahmud Keui, near Panderma: side of sarcophagus 1·70 × '60, letters '06.

ΥΠΟΜΝΗΜΑ
ΑΤΤΙΝΑΣΜΗΝΟΦΙΛΟΥΟΚΑΤΕCΚΕΥ
ΑCΕΝΕΑΥΤΩΚΑΙΤΗΣΥΝΒΙΩΑΥΡΗΛΙΑ
ΑΜΙΩ

Ἕπόμνημα
Ἀττινᾶ(ς) Μηνοφίλου ὁ κατεσκεύ-
ασεν ἑαυτῷ καὶ τῇ συνβίῳ Αὐρηλίας
Ἀμ(μ)ίῳ

10. Rest-house near Debleki, on the chaussée, one hour from Panderma : Funeral banquet stele, three persons, 75×50 , letters $\cdot 025$.

ΜΙΚΚΗ ΑΠΟΛΛΟΦΑ
ΝΟΥ ΧΑΙΡΕ

Μίκκη Ἀπολλοφά-
νου, χαῖρε.

A sketch of this stone is published in *Black and White*, Feb. 13, 1897, p. 207.

Of the inscription copied by Munro at Aksakal (*J.H.S.* xvii. 274 (19)), I made out, above the couplet published, ΛΗΛΑ^ΑΗΟΙΣ ΧΑΙΡΕ. The relief is of the horseman-type common in Thrace, with which the serpent and tree is here, as frequently, joined ; it has been defaced intentionally.

11. Aboulliond : fragment with mouldings, 0.29×0.19 , letters 0.03 .

ΦΙΛΟΚΤΙ

Φιλοκτῆ[της.

An uninscribed stele with relief of Apollo Citharoedus—the figure is 0.53 high and headless—is built into a house on the hill of H. Georgios, and deserves mention on account of its divergence from the ‘Sauroctonos’ type represented on coins as the cultus image of Apollonia.

The inscription of Aboulliond published *J.H.S.* xxiv. 26. 17 should read ΚΑΙΤΟΥΣΤ for ΚΑΠΟΥΣΤ.

12. Kermasti, house-wall of Soteris : broken banquet stele, letters about $\cdot 02$.

ΚΑΤΟΛΑΡΕ ΧΑΙΡΕ

We were told at Kermasti of a male statue found at Kavak Keui, and sent to the Imperial Museum, with the inscription Ἀρτέμιδος (Ἀρτεμίσιος?) γραμματεὺς τῷ δήμῳ: it is evidently from Miletopolis (Melde), where unofficial excavation is bringing to light a great deal of late Roman architectural detail and sculpture: coins of Miletopolis are extremely common in Kermasti, whence also comes a definitely Miletopolitan inscription (*B.C.H.* xxv. 327. (6)).

A copy of an inscription Ὅτεονεύς (i.e. Ἐτεωνεύς) Εὐαρέστῳ μνήμης χάριν was also shewn us.

13. At Susurlu I was shewn a small stele (0.46×0.27) of rough work, representing

Tree and altar.
Worshipper leading sheep.

Apollo in
long robe
holding lyre l.
and patera r.

The inscription (letters $\cdot 015$) is much worn and I could only decipher

ΟΝΝ(?)ΑΔΟΣ

Similar stelae from the district are enumerated in *J.H.S.* xxii. 87.

14. Mendoura (Mendokhora), near Balukiser: altar 0.82×0.35 , letters '05.

| | |
|------------|-------------------|
| ΝΑΣΩΝΤΥΧΙ | Νάσων Τυχι- |
| ΚΗΤΗΣΥΝΒΙΩ | κῆ τῇ συνβίῳ |
| ΚΑΙΚΡΙΣΦΟ | καὶ Κρίσ(πῳ) |
| ΚΑΙΟΝΗΣΙΜΙ | καὶ Ὀνησίμ[ω] |
| ΤΑΤΕΚΝΑΝ | τὰ τέκνα (!) μ[ν- |
| ΗΜΝΗΣΧΑ | ήμ(ν)ης χά- |
| ΡΙΝ | ριν |

15. Balukiser, in the street: altar 0.61×0.55 , letters '04.

| | |
|---------------|------------------|
| ΑΘΗΝΑΙΣΤΡΟΦΩ | Ἀθηναῖς τροφῶ |
| ΙΔΙΑΠΗΜΑΤΗΚΑΙ | ιδίᾳ Πηματῇ καὶ |
| ΑΜΜΑΕΤΟΥΣΣΚΓ | Ἀμμᾶ, ἔτους σκγ' |

16. In cemetery north of the town, rough granite ditto 0.92×0.41 , letters irregular, about '04.

| | |
|----------|-------------|
| ΤΥΧΗΡ | Τύχη Ἑρ- |
| ΜΟΥΑΝΝΙ | μοῦ Ἀννί- |
| ΟΓΛΥΚΟΝΙ | ῳ Γλυκωνι- |
| ΑΝΘΡΕΨΑΝ | ανῶ θρέψαν- |
| ΙΜΝΗΜΗΣ | τ]ι μνήμης |
| ΧΑΡΙΝ | χάριν |

Villages in and about the Karadere valley.

17. Iidja: marble block 0.68×0.28 , in mosque wall, letters '02.

| | |
|------------|--------------------------|
| ΜΗΤΡΟΔΩΙ | Μητρόδωρ[ος |
| ΕΧΗΔΕΠ | τέχνη? δὲ π . . . |
| ΕΙΚΟΣΤΟΜΕΓ | εἰκοστόν με . . . |
| ΗΡΠΑΞΕΤΟΦΘ | ἥρπα(σ)ε τὸ φθο[νερὸν |
| ΠΑΡΟΔΕΙΤ | παροδεῖτα |
| ΚΑΙΣΥΝΕΚ | καὶ σύ, νεκ[ρὸς περ ἐών? |
| ΕΡΟΥΦΩΤΟ | |
| Α ΔΑ | |

18. Assar Alan, at the mosque: altar 1.03×0.59 , letters '03.

| | |
|-----------------|------------------------|
| ΥΠΟΜΝΗΜΑ | ὑπόμνημα |
| ΑΝΕΙΚΗΤΟΥΕΥΗΕ | Ἀνεικῆτου (τοῦ) Εὐημέ- |
| ΡΟΥΟΚΑΕΣΚΕΥΑΣΕΝ | ρου ὃ κατεσκεύασεν |
| ΕΑΥΤΩΚΑΙΗΓΥΝΑΙ | ἑαυτῷ καὶ τῇ γυναι- |
| ΚΙΖΩΤΙΩ | κὶ Ζωτίῳ |

19. *ib.* in mosque wall high up: fragment of sarcophagus, letters '04, right edge complete.

| | |
|------------------------|-------------------------------|
| ΛΣ . ΠΣ | |
| Ν . ΙΚΙCIT . ΠΙΑΡΘ | |
| ΟΥΛΙΤΙCΙΟΚΑΙΤΗ | |
| ΙΝΑΚΑΙΤΟΙCΠΑΙΔΙΟΙCΑΥ | ... καὶ τοῖς παιδίοις αὐ- ... |
| Ε...Υ...ΛΕΙΟΝΩΔΕΚΑ | τοῦ ?] ᾧ δὲ καὶ |
| CΙ . CΒΛΗΟΠΙΝΑΙΟΕΛΗCΕΙ | ... σι[ο]ς βληθῆναι θελήσει |
| ΕΔΦ | (δην.) δφ, |

A much worn stele with relief of sacrifice to Zeus is built into the same mosque.

20. Boghaz Keui: fragment of small stele, with relief of bust, letters '015.

| | |
|-----------|---------------------|
| ΡΗΝΗ | Μητρὶ 'Ανδρι ?]ρηνη |
| ΜΗΤΡΟΔ' | Μητρόδωρος |
| ΝΕΘ . ΚΑΝ | ἀ]νέθ[η]καν |
| ΡΙ- | χα]ρι[στήριον |

The name of the goddess is a purely conjectural restoration based on *J.H.S.* xxii. 190. (1).

21. Yeni Keui (left bank of Tarsius, below Hodja Bunar): large oblong block with moulding 1·30 × 0·65, much broken, worn, and scratched, letters '03.

| | |
|---------------------|-------------------------------|
| ΗΠΣ | |
| ΟΙΓΡ' Φ | |
| ΕΚΛΙΩΔΕΩ | |
| ΑΧΑΡΗCΛΛΙΕ | ? παροδεῖτ]α χάρης . . . |
| ΕΙΠΛCΕΥCΕΡΙΠΙΛΛ | εἴπας εὐσεβίης ἔ]νεκεν |
| ΤΟΟΛΝΕΙΝΑΛΕ | τὸ θανεῖν ἀλε[γεινὸν |
| ΔΥCΑΔΕΛΦΟΙCΟΜ | ? ἡ]δὺς ἀδελφοῖς . . |
| ΦΟ . ΝΕΙΝΑΛΛΑΠΡΙΝΗΛ | φθ[ο]νεῖν, ἀλλὰ πρὶν ἡλ[ικίας |
| ΚΛ . ΙΟΝΕΩΝΠΡΟΤΕΡΟΙ | κα[ὶ γ]ονέων πρότερο[ς] ? |

Both extremities of l. 7, and the beginning of l. 9, are doubtful.

The Hodja Bunar inscription *J.H.S.* xxiv. 28. (28) should probably read *ἰππ[άρ]χω τῆς Κυζί]κου* rather than *ἰππ[άρ]χου*.

22. Alexa (on the left bank of the Karadere, below Suleimanly): small stele with pediment 0·45 × 0·25, and relief of horseman riding r. towards tree, letters '02.

| | |
|-----------------|-------------------|
| ΠΟΤΑΜΩΝΒΕΙΛΩ | Ποταμῶ 'Ενβείλω |
| ΕΡΕΝΝΙΟCΚΡΙCΠΟC | 'Ερέννιος Κρίσπος |
| ΕΥΧΗΝ | εὐχῆν. |

This inscription, found close down by the bed of the river, is paralleled by *C.I.G.* 3700 (seen by Pococke at Panderma), and identifies the river "Εμπηλος of Anna Comnena xiv. 5 definitely with the Kara-dere; similar dedications to an unnamed river are to be found in *J.H.S.* xix. 76, (31), (32), and *B.C.H.* xxv. 328, (7)–(15), inclusive: a neighbouring cult of Aesepus is mentioned by Aristides (i. 570, *Dind.*). "Εμβίλος occurs as a man's name in *J.H.S.* xxiv. 33, (49), and ΕΜΒΙΛΑ, from "Εμβιλᾶς, is perhaps the solution of Fabricius' ΕΜΡΙΧΑ from the neighbouring village of İlidja (*Sitzb. Berl. Akad.* 1894, 919).

23. *ib.* Banquet stele 0·73 × 0·41, letters ·012.

| | |
|----------------|------------------|
| ΣΟΤΥΣ | Κότυς? |
| Μ. ΝΕΛ. ΨΜΙΚΚΗ | Μενέβιος? Μίκκη. |

24. Gonen: M. Spiridion Bonsignor's copy of the inscription mentioned in *J.H.S.* xxiv. 29, runs as follows:

ΥΠΟΜΝΗΜΑ
 ΙΚΗΦΟΡΟΥΤΟΥΜΟΣΧΙΟΥΟ
 ΕΒΝΑΥΤΩΖΩΝΑΠΙΓΥΝΑΙΚΙ
 ΓΛΥΚΩΝΙΔΙΑΝΔΒΤΙΣ. . Κ
 ΛΛΑΠΙΘΩΡΠΡΕΛΛΗΓΝΘΟΝ
 ΕΙΗΠΟΛΕΙ. ΒΦΚΑΙΥΙΕΥΟΙ
 ΤΩΤΗΕΤΥΝΒΩΡΥΧΙΑΕΥΟ
 ΟΚΤΑΜΟΥΛΕΥΝ. ΕΒΑ. ΝΤ
 ΜΟΙΡΑΤΟΔΙΟΝΛΛΗΝΑ. ΟΓ
 ΟΥΛΗΟΙΠΑΡΑΛΟΥΣΤΑΕΑΛΛΟΦΤ
 ΩΝ. . ΧΟΝΤΕΡΑΝΝΕΚΗΦΟΡΟΕΟ
 ΚΑΛΛΟΣΑΚΚΙΕΤΙΕΠΕΙΩΟΟΓ
 ΩΝΑΡΙΤΧΕΡΩΧ. . ΠΑΠ

ἽΠόμενημα

Ν]ικηφόρου τοῦ Μοσχίου ὁ [κατε-
 σκεύα]σεν ἑαυτῷ ζῶν καὶ τῇ γυναικί
 . . . Γλυκωνίδι, εἰὰν δέ τις νεκρὰ
 ἄλλα ἐπιθήσῃ? ἢ συλήσῃ?
 δά]σει τῇ πόλει (δην.) βφ, καὶ ὑπεύθυνος
 ἔσται] τῷ τῆς τυμβωρυχίας ἐγκλήματι

The stone is a stele with pediment and relief of two busts above the inscription: its dimensions are 1·28 × 0·05 × 0·15.

25. *ib.*: fragment in wall of Hotel Bonsignor, letters ·035.

| | |
|----------|---------------------------|
| ΙΒΟΥΛΗΣΚ | ψηφίσματ]ε βουλῆς κ[αὶ |
| ΤΗΣ ΠΟ | δήμου] τῆς [λαμ]προ[τάτης |
| ΥΣΙΚΗΝΩΝ | Κ]υζικηνῶν [πόλεως |
| //////// | |

26. *ib.*: slab in fountain near the old mosque, 1·15 × 0·72, letters 02-015,

ΔΜΝΗΜΑ
ΟΥΠΟΤΑΙΟΥΟΕΚΙΗCΑΜΗΝΛC... ΥΚΟΙΝΗΛΙΟΥ
ΓCΑ ΟΟΝΕΥΟΡΗCΑ

Ῥπόμνημα

. . ου Ποπλίου δ' ἐκ(τ)ησάμην Λο[υκίο]υ Κο(ρ)νηλίου

.

27. Bigha-shehr, outside Ulu Jami: altar with moulding, 0·72 × 0·40, letters 04.

ΣΕΒΙΣΟΕΟΦΙΛΟ
ΚΑΤΕΣΚΕΥΑΣΕΝ
ΒΩΜΟΝΣΕΒΙΑΘΕΟ
ΥΙΛΛΟΥΓΑΤΡΙΙΔΙΑ
ΜΕΧΑΡΙΝΕΙΔΕΤΙ
ΙΑΚΕΙΝΗΤΗΔΥ
ΕΙΩΤΑΜΕΙΩΧΒ

Σέβις Θεοφίλο[υ]
κατεσκεύασεν τὸ[ν]
βωμὸν Σεβία Θεο-
φίλα θυγατρὶ ἰδίᾳ
μυ]ήμης χάριν· εἰ δέ τι[ς]
με]τακινήσῃ, δώ-
σ[ει] τῷ ταμείῳ (δην.) β.,

The name Sebes occurs in *Nonnus* xxviii. 29.

The following inscriptions are gleaned from the MS. journal of Dr. Covel in the British Museum.

(a) Cyzicus (Add. MS. 22914, p. 8).

ΥΠΟΜΝΗΜΑ
ΛΥΧΝΙΔΟΣΗΛΕΥ
ΘΗΡΟΜΕΝΗΣΟΚΑΤ
ΤΕΣΚΕΥΑΣΕΝΑΥ
ΤΗΟ ΙΟΥ
ΛΙΟΣ ΨΙΟΣ

Ῥπόμνημα
Λυχνίδος ἤλευ-
θ(ε)ρ(ω)μένης ὁ κατ-
<τ>εσκεύασεν αὐ-
τῇ Ὁ[κτάβιος ?] Ἰού-
λιος [ἀνε]ψιός

Mihallitch (Add. MS. 22912, p. 263).

(b) ΑΥΡΥ ΑΡΙΣΤΙΔΟΥ
ΟΚΑΤΕΣΚΕΥΑΣΕΝ
ΦΙΛΕΣΤΑΤΗΓΥΝΑ
ΣΥΝΦΕΡΟΥΣΗΚ

Ῥπόμνημα
Αὐρ. Ἀριστίδου
ὁ κατεσκεύασεν [τῇ]
φιλεστάτῃ γυναικί
Συνφερούσῃ κ[αὶ]

.

(c) ΝΗΜΑΘ
ΛΕΝΤΙΑΝΟΥ
ΟΥΚΒΕΒΙΑΣΤΕΡ
ΝΗΣΕΚΧΑΡΙΤΟΣ
ΛΥΣΑΝΙΟΥΘ

ὑπόμ]νημα
. . ? Οὐά]λεντιανοῦ
. . . . ου κὲ Βειβίας Τερ-
εντια]νῆς, ἐκ χάριτος
? ποιήσaiτος Π]αυσανίου

(d) Brusa, in the bath (Add. MS. 22912, p. 250).

ΥΠΟΜΝΗΜΑ
ΔΕΥΝΕΙΚΟΥΚΑΙΤΗCΕΥΝΟCΑΥΤΟΥΚΕΤΩΝ
ΠΑΙΔΙΩΝΑΥΤΩΝΤΟΙCΔΕΛΟΙΠΟΙC

ΤΟΛΜ
ΚΕΦΙCΚΩΥ . . . ΩΤΟΥ

Ἵπόμνημα

Δ. Εὐνείκου καὶ τῆς (συνεύνου) αὐτοῦ καὶ τῶν
παιδίων αὐτῶν τοῖς δὲ λοιποῖς [ἀπαγορεύω
εἰ δέ τις] τολμ[ήσει, δώσει τῷ ἱερῷ
ταμείῳ δην. βφ, ?] καὶ φύσκω

The designation of the monument as ὑπόμνημα betrays its Cyzicene origin: Cyriac (*B.C.H.* xiv. 540) notices that stones were brought from Cyzicus to Brusa for building purposes. Carelessness of lapidary or copyist is to blame for the confusion in l. 1. The inser. is published in a mangled form by Lucas (1719, vol. i. p. 300, No. 13).

F. W. HASLUCK.

[The following inscription (from Add. MS. 22912, p. 25), though not from the district of Cyzicus, is accounted of sufficient interest for insertion here as locating a small Byzantine site.]

Tuzla: church of the two Theodores.

ΑΥΡ·ΗΡΑΚΛΙCΓΑΙΟΥΟΙΚΩΝ
ΕΝΕΜΠΟΡΙΩΚΑΛΩΑΓΡΩΚΕ
ΗΤΟΥΤΟΥΓΥΝΗΑΥΡΑΝΤΩ
ΝΙΝΑΕΠΟΗCΟΜΕΝΕΑΥΤΟΙC
ΖΩΝΤΕC ΚΕΦΡΟΝΟΥΝΤΕC
CΤΗΛΛΗΝΜΗΜΗΝΕΑΥΤΩΝ
ΖΩΝΤΩΝΚΑ ΤΩΝΤΩΝ
ΚΛΗΡΟΝΟ ΥΠΟΛΛΟΙC
ΕΤΕCΙΝΑΥΤΩ . . . ΥCΙΑΖΙΜΔΕ
ΤΙCΕΤΕΡΟC ΕΠΙΒΟΥΛΕΥ
CΑΙΤΑΥΤΗΤΗΤΙΜΗΔΟΥΝΑΙ
ΤΩΤΑΜΕΙΩΑΡΓΥΡΟΥΛΙΤΡΑCΙ
ΚΑΙΤΟΥΤΟΕΓΡΑΨΑΔΙΑΤΩΝΤΙΝΩΝ
ΚΑΚΟΥΡΓΙΑCΙΤΙCΔΑΝΤΟΛΜΗCΙ
ΜΕΤΕΛΘΗΑΥΤΟΝΟΘΕΟC

ΧΕΡΕΤΕΠΑ
ΡΟΔΙΤΕ

Αὐρ. Ἡράκλις Γαίου, οἰκῶν
ἐν ἐμπορίῳ Καλῷ Ἀγρῷ, καὶ
ἡ τοῦτου γυνὴ Αὐρ. Ἀντων-
νίνα ἐποίησομεν ἑαυτοῖς
ζῶντεc καὶ φρονούντεc
στήλλην μνήμην ἑαυτῶν
ζώντων, κα[τεχόν]των τῶν
κληρονό[μων αὐτο]ῦ πολλοῖς
ἔτεσιν αὐτῷ [ἐξο]υσία(ν· εἰ) δέ
τις ἕτεροc [τολμήσι] ἐπιβουλεύ-
σαι, ταύτη(ν) τῇ(ν) τιμῇ(ν) δοῦναι,
τῷ ταμείῳ ἀργυροῦ λίτραc ἰ·
καὶ τοῦτο ἔγραψα διὰ τῶν τινῶν
κακουργίας· (ε)ἴ τις δ' ἂν τολμήσι,
μετελθῇ αὐτὸν ὁ θεὸc.

χέρετε πα-
ροδίτε.

The ἐμπόριον Καλὸς Ἀγρὸς is mentioned in *Niceph. Patr.* 61, *Theophan.* 609, *Actt. SS.* June 28, p. 349 : cf. Ramsay, *H.G.* pp. 184-5.

The spelling and style are characteristically illiterate throughout: the double appeal to earthly and heavenly powers against possible desecrators of the tomb is couched in rather unusual terms: cf. *J.H.S.* xxiii. 84 (34).

For the fine in pounds of silver we may compare *B.C.H.* xii. 199, 11 (Ghemlek) and note; pounds of gold are mentioned in similar inscriptions of Philippopolis (*Heuzey* 49) and Cyzicus (*Syll. Const.* vi. 173, 10): cf. also *C.I.G.* 3640 (Constantinople).

F. W. H.

NOTE.—While the above was in the press, several of the inscriptions mentioned have been edited by Dr. Wiegand in his valuable paper on Mysia (*Ath. Mittl.* 1904, 254 ff.).

VASES ADDED TO THE ASHMOLEAN MUSEUM.

PART II.

[PLATES I.—IV.]

I CONTINUE the catalogue of the vases recently acquired by the Ashmo-lean Museum, the first part of which catalogue appeared in this *Journal*, vol. xxiv. pp. 293-316. As before, the numbers given to the vases are those which they bear in the slip-catalogue of the Museum.

527. R.-f. Krater: the handles joining the body to the mouth. H. $14\frac{1}{4}$ in.

Decoration on neck, leaves (black) with stalks interlaced.

Obverse. Hermes to r. bearded, wearing chlamys and hat (behind neck), with drawn sword rushing on Argos, also bearded, naked, whose arms and



527

legs are covered with eyes, and who kneels to r. Wreaths of both figures in red.

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Reverse. Youth, clad in himation, leaning on staff.

For the subject, compare Roscher, vol. ii. pp. 277-9; *Ann. d. I.* 1865, 150; *Mon. d. I.* ii. 59. A full list of ninety vases in *Jahrb.* 1903, p. 37. With our vase, cf. Pl. II. *ibid.*

528. Krater from Capua. Subject, the seizure of Oreithyia by Boreas. Published in *J.H.S.* 1898, Pl. VI. p. 136.

529. Bell Krater. Late style; drawing poor. H. 16 in.

Decoration, laurel wreath round mouth: under handles, elaborate palmette.

Obverse. Two groups of warriors. On the left a youth seated on an altar or cippus, a sword slung round his body; his hand is held by a bearded



529; OVERSE

man; behind him, a youth holding spear, clad in petasus chlamys and boots. On the right a dignified male figure clad in himation, wearing fillet, leaning on staff, addresses a seated youth who wears a sword. Hung up in back-

ground, spear, shield, and helmet; another shield below. Both the shields adorned with wreaths.

Reverse. Two youths, and one bearded man and a youth, in conversation.

I have been unable to determine the subject of the obverse. The three youths seem to be returned from some expedition, the seated figure on the left appears to be ill or wounded.¹ There is a superficial likeness between



529; REVERSE

this scene and some of those (e.g. *Amer. Journ. Archaeol.* 1899, p. 578), which are supposed to depict the healing of Telephus; but the likeness is not close.

530. Small hydria of the middle of the fifth century. H. 11 in. (Pl. I.)

Above design, line of palmettes; below, maeanders.

The blinding of Thamyras. In the midst of a field sits Thamyras clad in chiton and Thracian boots; his eyes are closed, and the lyre falls from his outstretched hand. To the left is his mother Argiope, who tears her hair; to the right a Muse holding a lyre. The restorations are indicated by Mr. Anderson in dotted lines.

This vase is described in the *Anzeiger* of the *Jahrbuch* for 1902, p. 86, by Herr Zahn, who however describes Argiope as a Thracian woman. The marks upon her wrist doubtless, as Zahn suggests, indicate tattooing, which

¹ The appearance of a wound in the leg in the engraving results only from injury to the surface of the vase.

would indeed be more suitable in a Thracian woman than in the nymph Argiope. Such tattooing is found in the case of the Thracian women on Orpheus vases.² Nevertheless the grief seems better suited to the mother of the bard. A vase from Vulci gives a representation of Thamyris contending with the Muses; but the present vase is I think unique in giving us the disastrous result of the encounter. In the Hades of Polygnotus³ at Delphi, however, there was a kindred representation: 'Thamyris is seated near Pelias, his eyes destroyed, his whole appearance very dejected; there is much hair on his head, and an ample beard; a lyre is cast down by his feet with shattered frame and broken strings.' Some points here, the blindness, the dejection, the cast-down lyre, the abundant hair, correspond; the difference as regards the beard is probably one of date, our vase being somewhat later than the time of Polygnotus; the broken strings are a detail which the vase-painter would be likely to omit. I do not, however, suppose that the vase-painter has been influenced by the group of Polygnotus; probably he followed an artistic tradition, the memorials of which have perished.

531. Small hydria. H. 10 in.

Above, architectural pattern; below, meanders.



531

A lady seated on a chair to r., holding fillet (white). Before and behind

² *Mon. d. I.* ii. 23.

³ Paus. x. 30, 8.

her, two attendants; the one behind bears a mirror, a spindle (white), and a basket; the one before a wreath (white) and a dish.

Given by Mr. Fortnum.

A pleasing group representing a domestic interior, but conventional.

533 Red-figured oenochoe: mouth trefoil. H. 7 in.

Above design, line of palmettes; below, architectural pattern.

Nike, ΝΙΚΗ, clad in long chiton flying r.; she holds in her hands a fillet, another is in her hair: before her a great tripod on a basis.

From Nola. *Élite Céramogr.* i. Pl. XCI. *Cabinet Pourtalès*, Pl. VI., *Portalès Catalogue*, No. 194. Oldfield Collection.

This exquisite little vase is probably a record of a choragic victory at Athens. It is in the most perfect preservation, and of good style.

534. Oenochoe of the latter part of the fifth century. H. 8½ in. (Pl. I.)

Palmettes above, maeanders below.

A Satyr advancing to r. excitedly towards a Nymph, naked, who reclines asleep on a rock over which ivy twines, and which is covered by a panther's skin and drapery; she is crowned with ivy and holds thyrsus. Above is the inscription ΤΡΑΓΩΔΙΑ.

This is a marvellous piece of drawing, copied by Mr. Anderson with his usual skill and fidelity. The head of the Satyr, with loose hair and beard, is remarkable; also the anatomy of both figures. Unfortunately the face of the nymph is injured.

The interest of the vase, however, resides wholly in the execution; we need not seek any recondite explanation of the figures, which stand for an ordinary satyr and nymph. The name Tragoedia, added to the latter, is merely fanciful: we are accustomed in vases of this period, especially those of the Meidias class, to find fanciful names added to the male, and especially to the female, figures. No doubt there is an appropriateness in the name as applied to a nymph of the troop of Dionysus; and ivy-wreath and thyrsus go very well with the name. But it would be a mistake to suppose that the vase-painter really intended a representation of the muse of Tragedy.

It is natural to compare the Athenian relief found in the Peiraeus,⁴ on which appears a young male figure reclining, with a woman clad in a nebris seated at his feet, and three actors standing by. On the ground of the inscriptions, which however are certainly later than the relief, it has been suggested that the two chief figures are Dionysus and Paideia. But the inscriptions may be neglected; and if the relief is, as would appear, of votive character, we are almost obliged to see in the divine beings to whom the actors record their gratitude Dionysus and Tragoedia. In this case then we seem

⁴ *Ath. Mitth.* 1882, Pl. XIV. p. 389, Robert.

to find a purposeful impersonation of the spirit of tragedy in a nymph of the Dionysiac circle. But even so, the motive on our vase is so well known and so inappropriate to a personage like Tragoedia, that we must rather regard the nymph as an ordinary Maenad.



537 ; OVERSE



537 ; REVERSE

535. Lekythos: fine early style. Red palmettes. H. $25\frac{1}{2}$ in. (Pl. II.)

Apollo (ΑΠΛ) laureate, clad in himation; holds patera and lyre; meets Artemis (ΑΡΤΕ) clad in chiton and himation, who holds oenochoe and bow; a quiver at her shoulder, a doe walking beside her.

From Gela.

Fine and dignified types of the two deities. The figure and especially the head of Apollo bear so close a likeness to the Apollo on the obverse of No. 524 (*J.H.S.* 1904, p. 312) that the two vases must come from the same workshop, and were probably painted by the same hand.

536. Lekythos: fine style. Black palmettes. H. $12\frac{1}{2}$ in. (Pl. II.)

Sacrificial scene. A draped woman, a band in her hair, carrying a patera, and a youth with drapery girt round his waist, carrying meat on a spit and tripod inverted.

Unmeaning letters in the field.

From Gela.

537. Small Lekythos without stand: latter part of the fifth century. H. $7\frac{1}{4}$ in.

Decoration of elaborate palmettes.

Obverse. A lady fully draped seated on a chair, her hair loose, in her l. hand a mirror; behind, alabastron suspended. Above E.

Reverse. Maid-servant advancing with fillet and box. Above ΘΕΑΝΟ. (The legends are lost in the engravings.) This vase is very delicate in form and beautiful in drawing. The name Theano is doubtless fanciful; it was a common name at Athens.

538. Small round lekythos: late r.-f. style. H. 4 in.

Two hornless deer lying down, one on each side of a tree.

Found in a grave at Kertch, together with vases Nos. 541 and 542 and the armour and ornaments published by Mr. Ernest Gardner in *J.H.S.* v. 62, Pls. XLVI. and XLVII. The vases were no doubt imported from Athens.

Found and presented to the University of Oxford by Dr. Siemens.

539. R.-f. guttus: handle fixed to spout. Fine, not severe, style. Diam. $3\frac{1}{4}$ in.

Obverse. Satyr running r., holds in r. club, on l. arm skin of beast.

Reverse. Fox caught in spring trap, which is baited with ox-foot.

Pourtales Catalogue, p. 100, No. 181, Pl. XXIX. Schreiber's *Atlas*, Pl. 80, 3. Oldfield Collection.

The representation of the reverse is decidedly interesting, shewing that the Greeks used iron spring traps, probably armed with teeth. The two sides lay flat on the ground with the bait between them; when an animal touched the spring they closed on it. Such a trap, used in recent times, is preserved in the Ashmolean Museum.

540. R.-f. guttus: fine, not severe. Diam. $3\frac{3}{4}$ in.



Obverse. Winged male figure kneeling r. playing with astragali.

Reverse. Hornless dappled deer l. Oldfield Collection.

541. R.-f. guttus: fine, not severe. Diam. $3\frac{1}{4}$ in.



Obverse. Satyr squatting, tilting amphora from his shoulder, to fill drinking-horn.

Reverse. Satyr crawling on the ground, holding out drinking-horn.

542. R.-f. guttus: fine, not severe. Diam. $3\frac{1}{2}$ in.

Obverse. Dog running.

Reverse. Hare fleeing.



542

Nos. 541 and 542 were found in a tomb at Kertch by Dr. Siemens, and presented by him to the University of Oxford. See No. 538.



541

Attic polychrome lekythi, Nos. 543-9.

543. Design, woman carrying the corpse of a child in a coffin.

Published in *J.H.S.* xv. p. 328.

544. On shoulder, black palmettes. H. $11\frac{1}{4}$ in.

Sepulchral stele surmounted by palmette. On one side, a male figure mourning, wrapped in himation (yellow); a boy clad in red mounts the steps of the stele; above, a flying ghost.

Cerameicus, Athens, 1893.



546a

545. H. 14 in. (Pl. III.)

On shoulder, black palmettes. Sepulchral stele raised on steps: on one side, a woman in brown garment, bringing a toilet-vase and an alabastron; on the other side, a young man in red himation.

From Laurium, 1896.



546b

546. Designs in red and black.

On shoulder, palmettes. H. 10 in.

Sepulchral stele: on one side, a youth wearing pileus and chlamys



547

holding spears; on the other a woman bringing offerings; above a small ghost, and a bag suspended.

De Janzé Catalogue, No. 133. Oldfield Collection.

547. On shoulder, black rays. H. $8\frac{1}{4}$ in.

Charon in his boat amid reeds (garment red); he holds in his right hand a pole, and stretches out his left towards a small ghost, who flies to him with arms extended.

Painted in monochrome. Athens, 1899.

548. On shoulder, red palmettes. H. $14\frac{3}{4}$ in.



548

Woman advancing to right, clad in red chiton and black over-dress; she holds out a box. In the field a fragmentary inscription.

Vase shattered and in parts repainted.

549. On shoulder, red palmettes. H. 10 in. (Pl. III.)

Woman seated on chair (brown). Her garment seems originally to have been red, but the colour is now gone. She holds in both hands a wreath untied. Behind her a pillar (a house); in front a duck, above an oenochoe and ΚΑΛΟΣ ΛΙΧΑΣ.

See *J.H.S.* xvi. p. 167 : where Mr. Bosanquet assigns to the vase a date of about B.C. 465.

550. Late r.-f. pelike (so-called). H. $14\frac{1}{2}$ in. Yellow and white paint. Elaborate palmette patterns on neck and under handles. Below designs, maeanders.

Obverse. Aphrodite r. at bath which stands on pillar ; she pours oil on



550 ; OVERSE

her l. hand from alabastron ; behind, her clothes on a table. Facing her, female figure holding a metal crown, her over-dress curiously arranged like a

wing, and spotted. An attendant seated to r. by water-pot, another in field l. Above, Eros seated, holding wreath and branch, also a ball.

Reverse. Lady draped, seated l. on chest; she extends her r. hand towards a youth who stands before her, wearing chlamys, holding wreath and staff. Behind the lady, female attendant l.; above her, Eros holding a tray. In foreground, ball and pebbles. From the Basilicata. *Beugnot Collection*, No. 8; *Pourtales Catalogue*, No. 250. Oldfield Collection.

This vase is a good example of the painting of the Hellenistic age. The scene on the obverse is on the border between mythology and genre. Aphrodite is identified by the crown which her companion holds. Such a crown is worn by the beautiful seated Aphrodite in the painting of the Transtiberine Villa which is a copy of a painting of the fourth century;⁵



550 ; REVERSE

also by the standing Aphrodite of the Casa dei Dioscuri at Pompeii.⁶ Though descended from the early *polos* of the queen goddesses, it is in form curiously like a modern royal crown. The garment of the figure who faces Aphrodite is apparently arranged so as to resemble the wing of a butterfly; and one is strongly tempted to see in this figure, who is evidently no mere attendant, Psyche, who at this period was beginning to come into fashion. In that case we should have a new and interesting grouping of the three, Aphrodite, Eros, and Psyche.

Yet in fact this bath of Aphrodite represents a further advance in the course started by Praxiteles with his Cnidian Aphrodite, and is a scene of genre. Another such scene, but this time on a purely human level, appears on the reverse of the vase, which represents the greeting of a youth

⁵ *Mon. d. I.* xii. 21. Compare the remarks of Mau in *Annali*, 1885, p. 311.

⁶ Helbig, *Wandgemälde*, No. 295, *Mus. Borb.* viii. 34.

and a girl. It is highly probable that such vases as this were made for presents either to the women of the family, or more probably to hetærae. The same is true of the following two vases.

551. Pyxis adorned with white and gold : early fourth century. Diameter, 8 inches ; height $3\frac{1}{2}$ inches. (Pl. IV.)

On the cover seven female figures, ladies and maid-servants, holding wreaths and jewels ; two figures of Eros in white and gold conversing with them ; the place is a grove of shrubs. The knob of the cover was in metal ; it has disappeared.



551 ; COVER

Round the vase, thirteen similar women, and two figures of Eros ; flowers (gilt) rise from the ground.

It should be observed that on the plate the subject, which is produced by the very useful method discovered by Mr. A. H. Smith, is divided in two for convenience ; and thus a group of two female figures appears twice over.

552. Late r.-f. kylix. Diam. $8\frac{1}{2}$ in.

Exterior : under each handle three palmettes.

Obverse. Draped woman seated l. on chair, her knees grasped by a naked Eros ; on either side a standing female attendant.

Reverse. Similar group: the attendants extend their r. hands: ornaments in white.

Interior. In a circle of maeander pattern: draped woman seated r. on chair; Eros kneels on one knee at her feet, and holds her dress; behind Eros, column, and oval object hanging: ornaments in white.

Stackelberg, *Gräber der Hellenen*, Pl. XXXI. *Pourtales Cat.* No. 153.
Oldfield Collection.

Vase of Phoenician porcelain.

I take this opportunity to publish a remarkable vase of greenish porcelain, which came to the Ashmolean Museum as part of the Chambers Hall Collection many years ago. (Fig. 1.)

Vase without handles: H. 7 in.

Round *mouth*, rope-pattern.

On *neck*—

- (1) Festoons of small leaves, suspended by tie at intervals.
- (2) Line of waves, inverted.
- (3) Horned winged lions walking l. alternating with chess-board squares.
- (4) Rope-pattern.

On *body*—

- (1) IUIUI, etc. (architectural pattern).
- (2) Rope-pattern.
- (3) Rosettes of many petals.
- (4) Double rope-pattern.
- (5) Horned winged lions walking l. alternating with squares of geometric patterns, triglyph-like.
- (6) Rope-pattern.
- (7) Lotus plants with flowers and buds, growing on mounds; between them, ducks flying l.; one flying r.
- (8) Wave-pattern.
- (9) Pattern resembling scales.

Fabric of fine thin clay, beautifully made, and covered with a greenish enamel, which is no longer smooth. Some of the lines of decoration are in relief, some (the upper two in particular) impressed into the surface. This vase has long been a source of perplexity to Mr. Evans and myself. The provenience was fixed, since Mr. Hall's vases came from Italy, but the place



530



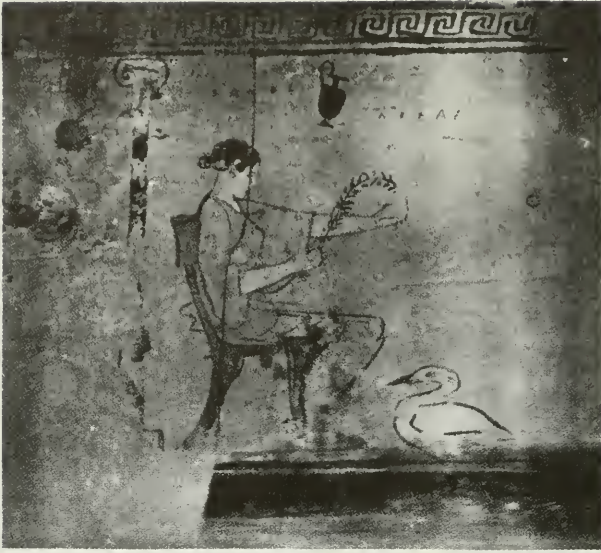
534



535



536

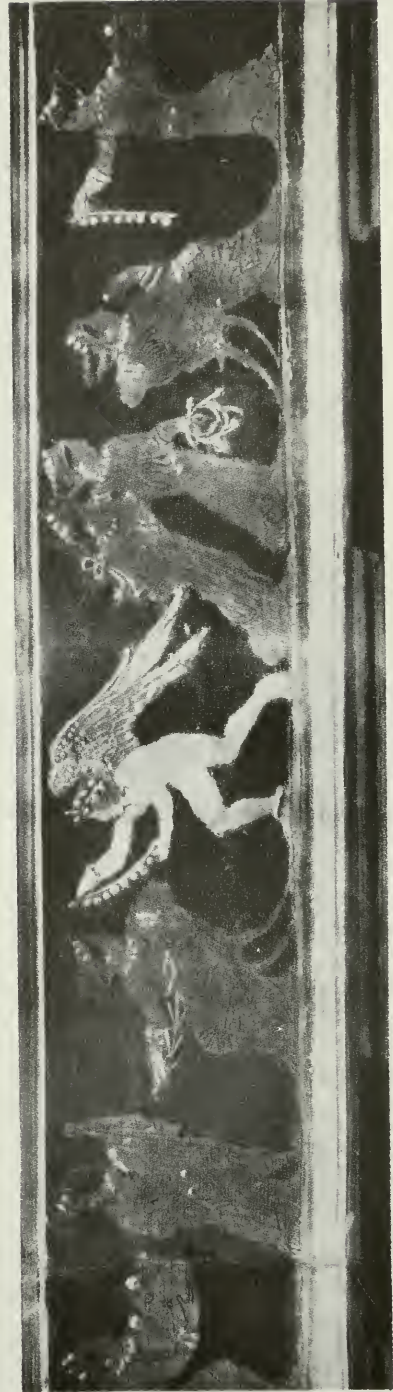


549



545

LEKYTHI IN THE ASHMOLEAN MUSEUM.



PYXIS IN THE ASHMOLEAN MUSEUM (551).

of its manufacture and the date were not easy to determine. Some indication alike of date and source was found when comparison was made of two fragments found at Naukratis, and presented to the British Museum by



FIG. 1.

the Egypt Exploration Fund. By the kindness of the keeper of Greek and Roman Antiquities, Mr. Cecil Smith, I am allowed to figure these fragments, drawn by Mr. Anderson :—

(1) Fragment on which is a line of winged lions separated by palmettes :

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above, festoon of leaves *impressed*,⁷ and wave-pattern : below, rope-pattern. (Fig. 2.)

(1) Fragment on which is an ivy-wreath *impressed*. (Fig. 3.)

The fabric and shape of these fragments correspond exactly with our vase. Besides them, there came from Naukratis to the British Museum fragments of coarser glazed ware, in particular the bottom of a vase adorned with a line of ducks and crosses, and a line of lotus.⁸ As to the date of the last mentioned fragment I should not like to pronounce. But I am of opinion that the Ashmolean vase, and the two corresponding fragments in the British Museum, belong to the early age of Naukratis. Ware with green-blue glaze of the same general type occurred in the Polledrara find, in the excavations at Cameirus,⁹ at Samos¹⁰ and elsewhere. Nine of the Cameirus vases are figured by M. de Longpérier in his *Musée Napoléon III*.



FIG. 2.



FIG. 3.

Pl. XLIX. (XXIX.). They are lekythi and alabastra of various types ; some adorned with lines of animals (lion, bull, antelope), some with impressed decoration (lotus). M. de Longpérier observes that two such alabastra were found at Athens, one of which is now at Leyden and one at Amiens. No. 6 of Longpérier's plate bears two cartouches, in each of which is 'le prénom de Psammitik II qui devint le nom de son successeur Ouaphres (Apries, xxvi^e dynastie).' The same cartouche occurs on an enamelled vase in the shape of a helmeted head from Corinth.¹¹ In regard to these vases the source is a matter of dispute. That they are copied from Egyptian models is quite clear. But it is not decided whether the copying was done by Greeks at

⁷ This fragment is A. 1240 in the (unpublished) *Catalogue of Vases in the British Museum* (vol. i.).

⁸ A. 1241 *B. M. Cat.*

⁹ Of these three are repeated in Perrot and

Chipiez, *Art in Phœnicia and Cyprus* ii, Pl. V.

¹⁰ Bochlau, *Aus Ionischen Nekropolen*, p. 161.

¹¹ Bochlau, *l.c.*

Naukratis, or by Phoenicians at Tyre and Sidon. The Naukratis theory has perhaps the most numerous supporters; but I incline to the view of Bochlau, that the whole class of vases is Phoenician, and that they came to Greece as vehicles of the fine oils and perfumes of Arabia.

When I say that these vases are of the same general type as the Ashmolean vessel, I do not overlook the marked differences between the two kinds of ware. The Ashmolean vase has nothing to do with perfumes. Its delicate moulding and careful ornamentation are very different from the careless work of the ordinary Phoenician alabastra. In these respects the nearest parallels to our vase are the round Egyptian alabastra of the seventh and sixth centuries, many examples of which have been found at Polledrara,¹² at Cameirus¹³ and elsewhere. A notable feature in the decoration of our vase is that it is produced by two quite different processes. Some of the lines of decoration seem to be produced by working away the background and sparing the figures; others by working on the figures and leaving the background untouched.

The devices on the vase run in bands which are closely parallel to the decoration of the bronze bowls brought by Layard from Nimroud,¹⁴ and now generally supposed to be Phoenician. Besides this arrangement in bands, there are common to the two classes of ware other features, such as great neatness of fabric, a combination of Egyptian and Assyrian elements, a monotonous repetition of the same decorative forms. Neatness of work combined with monotony and poverty of design mark Phoenician work in the sixth century; Greek work at that time is at once less masterly in execution, and far more original and promising in design.

Our vase, however, shews some distinctive elements, which may help us to fix its nationality. The line of lotus-plants and ducks is Egyptian beyond mistake. The horned (sometimes) and winged lion, or lion-headed griffin (Fig. 4), comes from another source. His history, which has been sketched by Prof. Furtwängler in Roscher's *Lexikon*,¹⁵ is very instructive. His earlier form, probably originating at Babylon, is that of a monster with lion's head, but eagle's wings, claws, and tail. This type meets us in earlier Persian art. But in somewhat later representations, the hind-legs and tail ceased to be those of an eagle and became those of a lion, while the head often retained the goat's horns which had sometimes appeared on the earlier type. At what time this transformation took place it is difficult to ascertain with precision. Furtwängler thinks it was about the middle of the fifth century. We find the later form on a Persian cylinder¹⁶; and it is frequent on the coins of

¹² See Micali, *Mon. Ined.* vii. 4, 5.

¹³ One of these vases found at Cameirus has on the edge an Egyptian hieroglyphic inscription. A figure of a dolphin in enamel from the same site bears, however, the Greek name of Pythes, indicating that Greeks as well as Phoenicians copied Egyptian enamels.

¹⁴ Perrot et Chipiez ii. Figs. 208, 209, 215,

etc.

¹⁵ Vol. i. p. 1775. It would be almost as correct to call the monster on our vase a Chimaera, as it has a lion's head, a goat's horns, and a long raised tail.

¹⁶ Lajard, *Mithra*, Pl. LIV. A. 13: Richter, *Kypros*, Pl. LXXVII. 5.

Panticapaeum (fourth century); while on a chalcedony from Kertch, in the Ashmolean Museum, and a coin of Lycia, both of the early fifth century,¹⁷ the monster's hind legs are still aquiline. In archaistic reliefs, such as that on a circular base of the British Museum,¹⁸ or the throne of the priest of Dionysus in the Theatre at Athens, lion-griffins are sometimes represented fighting with persons in Persian dress, or in other oriental connexion.

Until an example is produced in Greek art of the archaic period, in which the lion-griffin is represented with four leonine legs and a leonine tail, it must be very risky to suppose that our vase is of early Greek fabric, or that it originated at Naukratis. Rather, as I have already observed it is decidedly like the Phoenician bronze bowls, which combine, as does our vessel, Egyptian and Babylonian elements. The line of festoons also does not seem a possible decoration in Greek archaic art. I am therefore disposed to think that the Ashmolean vase is a Phoenician work of the later sixth or earlier fifth century, imported into Italy. That such vases should have been imported into Naukratis also is by no means surprising.



FIG. 4.—(DETAIL OF ASHMOLEAN VASE.)

We are bound, however, to take into account a vase of similar porcelain formerly in the Sabouroff Collection, and published in the *Sabouroff Catalogue*, Pl. LXX. This vase is in the form of a Greek kantharos, and a close imitation of a metal original; its decoration consists of a line of garlands, one of waves, and one of an architectural pattern, all three of which appear on the Ashmolean vase. It may, however, be noted that the ties of the garlands are much more developed in the Sabouroff vase. This latter was found at Tanagra in the same tomb with a porcelain figure of Eros riding on a duck, which is now in the British Museum. Prof. Furtwängler¹⁹ is

¹⁷ Gardner, *Types of Greek Coins* iv. 41: v. Pl. I.
J.H.S. Atlas, Pl. XLVII. 8.

¹⁹ Text to *Sabouroff Collection*, Pl. LXX.

¹⁸ *Cat. Sculpture* iii. No. 2512, cf. *B.C.H.* p. 3.

disposed to consider both these works as products of Alexandria in the Hellenistic age. And this opinion seems a reasonable one.

I do not consider it impossible, however, that the Ashmolean vase may date from the sixth or fifth century B.C. and be of Phoenician work, while the Sabouroff vase may be of a time two hundred years later, and of Greek work. The forms of the vases are very different; and though both shew an imitation of Egyptian work, they may be imitations by different races. We cannot assign a period to simple decorative designs so easily as we can to works of a more characteristic kind; and it is notable that the lines of decoration on the Ashmolean vase which are most distinctive, and give us the best clue to date, the ducks and the winged lions, do not appear on the Sabouroff example.

My view would therefore be that vases of this kind are usually Phoenician, and range over a considerable period of time. The Greek attempts at this kind of ware, such as the dolphin of Pythes and the Sabouroff kantharos, are exceptional.

I ought, however, to add that the editors of the *British Museum Catalogue of Vases*, Mr. Cecil Smith and Mr. Walters, are disposed to assign a later date, not earlier than the age of Alexander, to the Ashmolean Vase, and the British Museum fragments. We must wait for further evidence before we can decide for one of these views or the other.

P. GARDNER.

HELLENISTIC ROYAL PORTRAITS.

[PLATES VIII.—X.]

THIS paper does not pretend to be the result of original research, but to be rather a compilation of the various identifications of bronze or marble portrait heads¹ as kings of the great dynasties of the Hellenistic period, that different archaeologists have proposed from time to time. In the course of my study of the evolution of later Greek art, I proceeded from studying the series of coins of the Hellenistic dynasties to examine the portraits identified by means of the coins. I hoped by that method to obtain surer ground for the succession of styles in the period. But there is so much uncertainty and often complete contradiction as regards the identification of the portraits, that so far a study of the portraits has yielded little. Many of the heads identified as kings are not kings at all. In fact there exists too great a tendency to believe that every fine individual portrait must be that of a king or some other great man. Private portraits must have been even more plentiful than royal portraits, and as works of art would stand an equal chance of preservation. It is however very tempting to seize on a slight likeness and identify a nameless portrait as a king. I have attempted to be moderate: the only new identification proposed is that of a head in the Museo delle Terme, hitherto known as a Hellenistic prince, as Antiochus VI. In criticising the identifications proposed by others the profile of the head has been compared as closely as possible with the coin portrait. And according to the degree of likeness or unlikeness between the two, the identification has been accepted or rejected. Though this method usually leads to a sceptical conclusion, I am fully aware of the difficulty and danger of attempting to identify a life-size portrait in the round with a miniature profile in relief on a coin. I willingly acknowledge my indebtedness to the scholars whose conclusions I discuss so cavalierly. There are collected in the following lists only the identifications concerned with the four great dynasties, the Antigonid, the Seleucid, the Ptolemaic, and the Attalid. The royal houses of Bithynia, Cappadocia, and Pontus have been disregarded for the

¹ I have purposely omitted all reference to portraits on gems, since they have peculiar difficulties of their own.

present, though a fine head in the Louvre has with some reason been called Mithridates Eupator.² Pyrrhus and Lysimachus have been included merely for the sake of cross reference. The main object has been to shew the unsatisfactory nature of most of the identifications hitherto proposed, and to attempt to provide a basis for further investigation.³

I.

ANTIGONID DYNASTY.

A.—Demetrius Poliorketes.

(1) Marble bust from Herculaneum. Naples, Inv. 6149. Comparetti, *De Petra*, xx. 3. Arndt, 353, 354. Wolters, *Röm. Mitth.* 1889, p. 37.

(2) Bronze statuette, Naples, Inv. 5026. Arndt, 355, 356. *Jahrbuch d. Sammlungen d. allerrh. Kaiserhauses*, 1884, p. 52.

(3) Bronze statuette, Parma. *E.V.* 73. Six, *Röm. Mitth.* 1903, p. 216. Schreiber, *Studien ü. d. Bild. Alexanders*, p. 125. R. 2. as Alexander.

(4) Marble head, Vatican. Sala dei Busti, 338. Helbig², 255. Six, *Röm. Mitth.* 1903, p. 211, figs. 2, 3 as Alexander Ammon; *ibid.* 1889, p. 196. 1. Arndt, 489, 490.

(5) Marble head, Lateran. Benndorf, *Schöne*, 236. Arndt, 351, 352. Gräf, *Bursians Jahresberichte*, cx. (1901), iii. p. 136. Schreiber, *Studien ü. d. Bild. Alexanders*, p. 88, 26.

(6) Louvre. Marble head. No. 457. See Ptolemaic Dynasty, Soter I. 1.

Of these five portraits the second and third are too small to have any iconographic value, since they are merely reduced copies. The head in the Lateran (5), though it is clearly derived from a good original, is a very poor copy, and is very hard and spiritless. Still it clearly represents the same person as the beautiful Vatican head (4), which is certainly Greek work of the late fourth century. These compared with the coin portraits appear to correspond almost exactly; most noticeable indeed is the peculiar formation of the brow over the outer corner of the eye. Therefore it seems reasonably certain that in these two heads we have a portrait of Demetrius. The

² Winter, *Jahrbuch* 1894, Pl. 8. H. de Villefosse, *Cat. Somm.* 2321.

³ I would refer throughout to Arndt-Bruckmann's *Gr. u. Röm. Porträts* (cited as Arndt), and Imhoof-Blumer's *Porträtköpfe hell. u. hellenisierter Völker*. I wish also to express my thanks for assistance received to

Miss McDowall, who has read part of my MS., to Mr. Wroth, Mr. Macdonald, and Mr. G. F. Hill. I have also profited much from discussing various points with other archaeologists at home and abroad. I am also under great obligations to Dr. Dressel for permission to publish the Fox tetradrachm.

Naples bust (1) on the other hand has some likeness to the coin portraits, but is much younger, and in workmanship it is not very good. However it is possible to assume it to be a youthful and idealized portrait of Demetrius, executed in the last years of the fourth century by a second-rate artist.

A^a.—Pyrrhus.

See Seleucus I. 2.

A^b.—Lysimachus.

See Ptolemy Soter 3.

B.—Philip V.

See Perseus 1 and 2.

C.—Perseus.

(1) Marble head in British Museum; from Hadrian's Villa. Newton, *Guide to Græco-Roman Sculptures*, p. 48, No. 129. *Museum Marbles*, ii. 23, Brunn-Bruckmann, 80. Hill, *Num. Chr.*, 1896, p. 35, Pl. IV. Petersen, *Röm. Mitth.*, 1895, p. 135, as a Gaul's head. *Brit. Mus. Sculpture Cat.* iii. 1860. Replicas in Vatican, Sala dei Busti, 310, Helbig,² 245, and in Louvre, H. de Villefosse, *Cat. Somm.*, 32. Newton calls attention to the likeness between this head and the portraits of Perseus and his father Philip V.

(2) Bronze statue, Museo delle Terme. Helbig,² 1114. Hill (*loc. cit.*) says Studniczka identifies it as Perseus. Helbig (*Ant. Denk.* i. 5) has also identified it as Philip V. Arndt, 358, 359. Six, *Röm. Mitth.*, 1898, p. 77.

(3) Small marble bust, Naples, Egyptian section, 1037 (now with other busts) Arndt, 347, 348. Six, *Röm. Mitth.*, 1898, p. 74.

Of these portraits the first is almost certainly not a royal portrait as there is no fillet round the head: further it shews no individual characteristics. It is a Roman copy of the imperial period after a Greek original of the early second century B.C. Its style resembles, as stated by Petersen and Furtwängler,⁴ Pergamene work. The Terme bronze (2) has also been called Philip V and Alexander Balas (see below): Helbig rightly says it bears only a slight resemblance to the coin portraits of any of the three kings. On the other hand the Naples bust (3) in spite of the severe damage it has suffered agrees with the coin portraits, and is almost certainly a good realistic bust of Perseus.

⁴ *Arch. Anz.* 1891, p. 141.

II.

ATTALID DYNASTY.

A.—Philetaerus.

Marble bust in Naples, Inv. 6148, from Herculaneum. Arndt, 107, 108. Comparetti, *De Petra*, xxi. 2. Gercke, *Bonner Studien*, p. 139. Furtwängler (*Masterpieces*, 321.1) says the lower part of the face is unlike the coin portrait, and suggests that it may be Philip II. of Macedonia.

There is no fillet round the head to indicate royal rank, but Philetaerus was never *Βασιλεύς*. So if it were a contemporary portrait no fillet would be expected: but in a post-mortem portrait Philetaerus as a deified ancestor would wear a fillet as on the coins of his successors.⁵ Philetaerus ruled from 283 to 263 B.C., and this head hardly seems to belong to the first half of the third century. Therein, in my opinion, lies the chief difficulty in identifying it as Philetaerus.

B.—Attalus I.

Marble bust, Naples, Inv. 6141, **Pl. IX. 2.** Arndt, 109, 110: Petersen, *Röm. Mitth.*, 1895, p. 135: called Aratus, Bernoulli, *Gr. Ikonographie*, ii. p. 153. Gerhard, *Neapels ant. Bildwerke*, 379.

This head bears little resemblance to the coin portraits⁶ of Attalus; it has no fillet, which Attalus as *Βασιλεύς* would certainly wear. On close examination it appears to be a portrait, somewhat idealized (perhaps of a Roman general), executed by a good Greek artist in the first century B.C. In certain details it shews a stylistic kinship to the 'Borghese Warrior.'

C.—Apollonis.

Marble bust, Berlin, Pergamon Museum. *Führer durch d. Perg. Mus.* p. 43.

This identification is only a conjecture. The head from the diadem and veil should represent a goddess or queen: and because it seems to be rather individual in treatment, it is suggested it is Apollonis. There is no other evidence for the identification. Most probably it is a goddess.

⁵ See the Plates in Imhoof-Blumer, *Die Münzen d. Dynastie von Pergamon*.

⁶ See the Appendix below.

III.

PTOLEMAIC DYNASTY.⁷

A.—Soter I.

(1) Marble head, Louvre, H. de Villefosse, *Cat. Somm.* 849. Wolters, *Röm. Mitth.*, 1889, Pl. III. p. 33. Schreiber, *Studien ü. d. Bild. Alexanders*, 198-9. 'Ein richtiges Porträt.'

(2) Marble head, Thera. Hiller von Gärtringen, *Thera* i. Pl. 21.

(3) Bronze bust, Naples, Inv. 5596. Six, *Röm. Mitth.*, 1894, fig. 1, p. 103, as Lysimachus. Rossbach, *Neue Jahrb. kl. Alt.*, 1899, p. 53. Comparetti, De Petra, ix. 3. Arndt, 91, 92, as Philip II. Schreiber, *Studien ü. d. Bild. Alexanders*, p. 88, p. 198-9. 'So fälschlich Rossbach.'

(4) Bronze bust, Naples, Inv. 5590. Visconti, *Iconographie Grecque*, iii. p. 289. See Seleucid Dynasty, Seleucus I. 1.

(5) Marble bust, Naples, Inv. 6158. See Seleucid Dynasty, Antiochus IV. Arndt, 97, 98.

(6) Marble bust, Museo Torlonia. Visconti, *Musco Torlonia in fototipia*, Pl. XI. 43. See Arndt, text to 97.

Of all these portraits the second is the only one that seems to me to bear, in spite of the damage it has suffered, any great and striking likeness to the coins. It is probably a genuine portrait of Soter: and the essential characteristics of its style, the exaggeration of prominent features to deify the individual, are those of the early third century. The third portrait is possibly, as determined by Six, Lysimachus: the fourth is almost without doubt a fine portrait of Seleucus Nicator. The fifth is neither Soter I., nor does it, as stated by Arndt, seem to represent the same person as the sixth. On the other hand the sixth, so far as it is possible to judge without seeing the original, is a replica of the first. This head, represented by these two replicas (1 and 6), is possibly a portrait of Soter in middle life; but when the profile is compared with the coin portraits the likeness does not seem satisfactory.

B.—Berenike.

(1) Bronze bust, Naples, Inv. 5598. Comparetti, De Petra, vi. p. 266, No. 30. Arndt 99, 100. Bernoulli, *Röm. Iconographie*, I. p. 235. Visconti, *Iconographie Grecque*, pl. 52, 6, 7. Six, *Röm. Mitth.*, 1894, p. 117. Mau, *Bull. d. I.*, 1880, p. 125. Mommsen, *Arch. Zeit.*, 1880, p. 32. Schreiber, *Studien ü. d. Bild. Alexanders*, 198, 10.

⁷ A herm in the British Museum, 1741, is called a Ptolemaic portrait. It wears a fillet; but it is iconographically useless, even if it is a

Ptolemaic portrait. Mr. A. H. Smith in his recently published third volume of the sculpture catalogue calls it a Heracles (?) herm.

Bronzi d'Ercolano I. 59, 60. Rossbach, *Neue Jahrb. kl. Alt.*, 1899, p. 57, 1, as Cleopatra wife of Ptolemy V., Epiphanes.

It is generally admitted that this bust cannot represent Berenike, though Schreiber has recently supported this view. It has also been named Ptolemy Apion (*Bronzi d'Ercolano*), Aulus Gabinus (Comparetti), a Hellenistic prince (Arndt), and the Lady of the Herculaneum villa (Six). Arndt believes the head to be male; Six and Bernoulli consider it female. It is in all probability a male head, and only the hair makes it appear at first sight female. As rightly determined by Six, not only the loose locks round the forehead, but also the whole upper part of the head with the fillet are restored. But the fine curls incised on the forehead, and the close-lying corkscrew curls behind the ears, which are original, prove the head to be after an African original. I have elsewhere⁸ called this head a Graeco-Egyptian portrait. There is no reason however for supposing this style of hair-dressing to have been peculiar to Egypt: heads with the hair similarly arranged have been found in Africa.⁹ There is no clue whatsoever to the identity of the person here represented. And even if it were known for certain that the Herculaneum *dilettante* collected these heads as portraits rather than as works of art, only plausible conjectures might be made.

(2) Basalt head, Vienna. Von Schneider, *Album d. Ant. Sammlung*, 6. xiii. 1. Schreiber, *op. cit. loc. cit.*

Both von Schneider and Schreiber think this head represents the same person as the Naples bronze. This seems doubtful, since the latter is probably male, while the Vienna head is certainly female. It is good Graeco-Egyptian work, but it is hard to say if it agrees with the coin portrait, since that is found only in conjunction with and behind the head of Soter I. Probably the head belongs rather to the second century.

C.—Philadelphus.

(1) Bronze bust, Naples. Inv. 5600, **Pl. VIII. 1.** Comparetti, *De Petra*, ix. 4. Arndt. 93, 94, Six, *Röm. Myth.*, 1903, p. 217. Rossbach, *Neue Jahrb. kl. Alt.*, 1899, p. 50.

Six, since he does not mention Rossbach's previous identification, must have arrived at his conclusions independently. This in itself is perhaps some ground for accepting the identification, that two archaeologists working separately have arrived at the same conclusion. But I must confess that when the head is compared to the coin portraits, the identification does not seem convincing. Further, from its style, the head seems to me to belong to the later third century.

⁸ *B.S.A.*, 1902-3, p. 226, 4.

⁹ e.g. *Brit. Mus. Sculpture Cat.* iii. 1773, from Carthage.

(2) Head, Sieglin collection, Stuttgart. Unpublished; said by Schreiber to resemble the Naples bust, and a small head at Ny Carlsberg (Arndt, 356 c. d). Schreiber, *Studien ü. d. Bild. Alexanders*, 129, 12.

D.—Euergetes I.

Marble head, Museo delle Terme (formerly in Museo Kircheriano). Mariani and Vaglieri, *Guida*, p. 42, No. 30.

My friend, Dr. Pfuhl, suggested to me that this head was a portrait of Euergetes I. With that view I ventured to disagree, arguing that from its style it belonged rather to the second than to the third century. If it must be a Ptolemy it has far more likeness to the portraits of Philometor: but the fact that there is no fillet seems to be against identifying it as a royal portrait.

D^a.—Berenike, wife of Euergetes I.

(1) Head in green basalt, Amherst Coll., Didlington Hall. From Berenike. Lady Amherst, *Sketch of Egyptian History*, p. 189, Pl. I.

Since the important parts of the face, nose, mouth and chin, have been broken off there seems to be no ground for the identification: and owing to the damage done to the head a comparison with the head on the coins is impossible. From its style the head appears to be a copy of the early imperial period of a bronze original probably of the third century B.C.

(2) Bronze head from Herculaneum. Naples, Inv. 5599. Comparetti, *De Petra*, x. 3. Reinach, *Têtes Idéales ou Idéalisées*, 220. *Bronzi d'Ercolano*, I. 63. Rossbach, *Neue Jahrb. kl. Alt.*, p. 57, 1, as Arsinoë. Friederichs-Wolters, 1603.

There is no reason why this head should be called Berenike. It is probably only due to the same desire for naming heads, which has led to the archaic Apollo bust from Herculaneum being labelled Speusippus. Nor is there any real reason for identifying it as Arsinoë: it has hardly any likeness to her coin portraits. The head is perhaps a portrait; but in any case it is not earlier than the first century B.C., though it shews kinship as regards treatment with heads similar to an Apollo in the Capitol.¹⁰ Reinach suggests that it is an Artemis after Leochares, connecting it with the Diana of Versailles.

E.—Philopator and Arsinoë.

(1) See Watzinger, *Das Relief v. Archelaos. Brit. Mus. Cat. Sculpture* iii. 2191.

(2) Marble head. Amherst Coll., Didlington Hall.

¹⁰ Helbig, ² 443.

This head is called Arsinoë without any sufficient reason, and it does not bear the slightest resemblance to the coins. From its style it appears to be a copy of about the first century A.D. of an earlier original. The original, to judge by the degree of development of the *morbidità* in the cheeks and eyes, would have belonged to the middle of the third century B.C.

(3) See Berenike, *D^a*. 2.

F.—Epiphanes.

Bronze bust, Naples, Inv. 5588. Rossbach. *Neue Jahrb. kl. Alt.* 1899 Pl. I. 4. Comparetti, *De Petra*, ix. 2.

There is no fillet round the head, and it seems exceedingly improbable that it is a royal portrait at all.

F^a.—Cleopatra (I.). See Berenike, *B.* 1.

G.—Cleopatra (VI.).

(1) Marble head, Alexandria. Botti, *Catalogue du Musée Gréco-Romain*, Salle xvi. 301.

This head was found in the eastern harbour of Alexandria, and the whole surface is badly eroded by the action of salt water. When seen in profile, it has considerable likeness to the portrait of Cleopatra on her coins. It may therefore be a portrait of her, but owing to its condition it has little artistic value, and a definite decision as to the likeness is almost impossible.

(2) Marble head, British Museum, 1873 (bought from Castellani), *Cat.* iii. Pl. XXI.

This head has been called Cleopatra chiefly because of the great likeness shewn by the profile, especially the nose, to the coin portraits. There is however no diadem; and the curious arrangement of the hair suggests Roman fashions of the second century A.D. It may be a late Roman attempt to copy an earlier portrait of Cleopatra. But its provenance is Roman; and the workmanship, notably the hard realism of the keen, dry features, is also Roman. Therefore the balance of evidence seems to be against its being a Greek portrait.¹¹

IV.

SELEUCID DYNASTY.

A.—Seleucus I.

(1) Bronze bust, Naples, Inv. 5590, **Pl. VIII. 2.** Comparetti, *De Petra*, Pl. X. 1; Arndt, 101, 102. Visconti, *Iconographie Grecque* iii. p. 289, as Soter I. Wolters, *Röm. Mitth.* 1889, p. 32. Rossbach, *Neue Jahrb. kl. Alt.* 1899, p. 53, as Soter I.

¹¹ For other heads called Cleopatra, see Bernoulli, *Röm. Ikon.* I. p. 212.

(2) Marble bust, Naples, Inv. 6150. Arndt, 337, 338. Comparetti, *De Petra*, xx. 5. Six, *Röm. Mitth.* 1891, p. 279, as Pyrrhus. Helbig, *Mélanges d'Arch. et d'Hist.* 1893, p. 377, accepts it as Pyrrhus, and compares with it a head in the Jacobsen collection, which has no fillet (No. 1082, Arndt 339, 340). Rossbach, *Neue Jahrb. kl. Alt.* 1899, p. 53, as Seleucus I.

(3) Marble head, Museo delle Terme. Mariani and Vaglieri *Guida*, p. 22, 18, Helbig,² 1030.

(4) Bronze statuette, Naples, Inv. 5026. Visconti, *Iconografia Greca* ii. p. 80, pl. 3. See Demetrius Poliorketes 2.

(5) Marble head, Erbach. Anthes, *Cat.* 17. Arndt 497, 498. Visconti, *Iconogr. Rom.* II. p. 90. Six, *Röm. Mitth.* 1898, p. 66, Pl. III.

Of these five heads, the Naples bronze (1) is almost without doubt an authentic portrait of Seleucus: in all features it agrees exactly with the coin portraits. In style and execution it is superior to the other royal portraits from Herculaneum both in bronze and in marble. Wolters finds considerable likeness in details between it and the Apoxyomenos. At all events the original of the Herculaneum bust was by one of the first artists of the late fourth century. The second head has only a most superficial likeness to the portrait on the coins, even that shewing Seleucus helmeted.¹² Till any better identification can be proved, it is fairly safe to accept Six's views and call it Pyrrhus. Of the two remaining portraits the fourth has been discussed elsewhere; and the third I have included here because of its superficial likeness to the second, though it represents an older man and is very badly damaged. The fifth head is probably not a portrait, but a Roman attempt at the ideal founded on the type of an Ares.¹³

B.—Antiochus I.

(1) Marble bust, Munich. Furtwängler, *Beschreibung*, No. 309. Wolters, *Arch. Zeit.* 1884, Pl. 12. Bernoulli, *Röm. Ikonographie*, i. p. 84. Brunn, *Glyptothek*,⁵ 172 (who does not accept Wolters' identification).

(2) Marble bust, Vatican, Sala dei Busti 275. Helbig,² 219. Arndt, 105, 106. Bernoulli, *Röm. Ikonographie*, ii. p. 30. Gräf, *Jahrb.*, 1902, p. 72, Pl. 3. Milani, *Röm. Mitth.* 1891, p. 318. Visconti, *Mus. Pio-Clem.*, vi. 40. Ramsay, *Cities and Bishoprics*, i. 56. Hill, *Jahresh.*, ii. (1899), p. 246. Schreiber, *Studien ü. d. Bild. Alexanders*, 273, 1, 'Nach Gräfs sicherer Deutung.' Six, *Röm. Mitth.* 1903, p. 215, 'Gräfs Resultate sicher falsch sind.'

In my opinion neither of these heads is a portrait of Antiochus I. The Munich bust (1) has no fillet, and both Brunn and Furtwängler agree in

¹² v. *B.M.C. Seleucis*, Pl. I. 11.

Mariani, Vaglieri, *Guida*, p. 22, 21. Helbig,²

¹³ Cf. a head in the Museo delle Terme. 1032.

calling it Roman work of the later Republican period. Besides it has little or no resemblance to the coin portraits. The Vatican head (2) also has only a slight and superficial resemblance to Antiochus as represented on his coins. In spite of the ivy wreath under the diadem I am unable to believe that the head represents a Hellenistic prince as a νέος Διόνυσος. In spite of Hill's disbelief I am more inclined to agree with the opinion that we have here represented a priest of the cult of the imperial house,¹⁴ as shewn by the medallion on the diadem. The bust of a priest from Ephesus should in particular be compared with this.¹⁵ The head on the medallion is too defaced to admit of identification, but this proves nothing either way. Even if it is a νέος Διόνυσος, it is not Antiochus I. since he was worshipped as Ἀντίοχος Ἀπόλλων Σωτήρ.¹⁶ Visconti's and Milani's identification of the head as an aged Augustus is, as Hill says, without any real ground. Mr. Stuart Jones has suggested to me that this head represents a priest of the cult of one of the later Diadochi. This is very probable, and would satisfy all its peculiarities.

C.—Antiochus II.

(1) Bronze bust, Naples, Inv. 5594; Brunn-Bruckmann, 365. Comparetti, *De Petra*, x. 2. Rossbach, *Neue Jahrb. kl. Alt.* Pl. I. 3, p. 55. Furtwängler, *Masterpieces*, 296, 5b.

(2) Bronze statuette, Naples, Inv. 126170. *Not. degli Scavi*, 1901, p. 300 (Perseus, good Roman work). Hauser, *Phil. Woch.* 1903, p. 157, as Antiochus VIII. Schreiber, *Studien n. d. Bild. Alexanders*, p. 279 sqq. See Antiochus VIII.

Of these two portraits the second will be discussed below, and the first is called in Baedeker's Southern Italy 'Youthful Heracles.' This designation is the more correct. One point I feel is certain, and that is that it is no royal portrait at all. It is an ideal athlete type of rather late date: in other words it is an adaptation of the Roman period after Greek work of the later fourth or third century. The features when seen *en face* have considerable likeness to the 'Hermes' of Antikythera.¹⁷ In style and execution however it is much inferior.

D.—Laodice.

Marble head, Constantinople. Joubin, *Cat. Somm.* 51. Rossbach, *Phil. Woch.* 1901, p. 1179. *Rev. Arch.* 1888, p. 84, Pl. XV. From Cyme.

¹⁴ Of course not a priest of Caesar worship under the Antonines. See the quotation from Conybeare in Ramsay, *loc. cit.*

¹⁵ *Jahresh* *loc. cit.* Fig. 131, and Pl. 8.

¹⁶ *C.I.G.* 4458.

¹⁷ My friend, Mr. A. M. Daniel, tells me that he arrived at exactly the same conclusion, after studying this bronze independently in Naples. Cf. Waldstein, *Ill. London News*, 1903, June 6th, No. 21.

This identification does not seem to me at all satisfactory, neither does that of the following bust as Seleucus II. In fact both heads seem to me to belong to the early Imperial period, to which period Joubin has assigned them.

E.—Seleucus II.

Marble head, Constantinople. Joubin, *Cat. Somm.* 82. Rossbach, *Phil. Woch.* 1901, p. 1179. *Rev. Arch.* 1888, p. 84, Pl. XV. From Cyme.

F.—Antiochus III.

Marble bust, Louvre. H. de Villefosse, *Cat. Somm.* 1204 Arndt, 103, 104. Bernoulli, *Röm. Ikonographie* I. p. 160. No. 32. Collignon, *Hist. Sculpt. Grecque*, II. p. 597.

This bust was formerly called Caesar, but is now almost universally admitted to be a fine portrait of Antiochus III. When compared with the coin portraits, which vary considerably in details, the likeness between them is indeed striking, and admits of little or no doubt. However from its style and material (Carrara marble) it cannot be an original, but merely a good Roman copy.

G.—Antiochus IV.

Marble bust, Naples, Inv. 6158, as Soter I. Arndt 97, 98. Comparetti xxi. 4. Rossbach, *Neue Jahrb. kl. Alt.* 1899, p. 56.

This bust is clearly a royal portrait: this is proved by the fillet. The strong individual characteristics of the features are striking. Arndt imagines it to be Soter I. (see Ptolemaic Dynasty A. 5): Rossbach identifies it as Antiochus IV. Neither of these identifications is satisfactory. The fact that it has been identified as Soter I. and Antiochus IV., who were, to judge by their coin portraits, totally unlike one another, is in itself evidence that we have still to find a convincing identification. From its style it belongs to the first half of the second century.

H.—Demetrius I.

Marble herm, Naples, Inv. 6164. Rossbach, *Neue Jahrb. kl. Alt.* 1899, p. 57, Pl. II. 6. Comparetti, *De Petra*, xxi. 3. Furtwängler, *Masterpieces*, p. 234, Fig. 95.

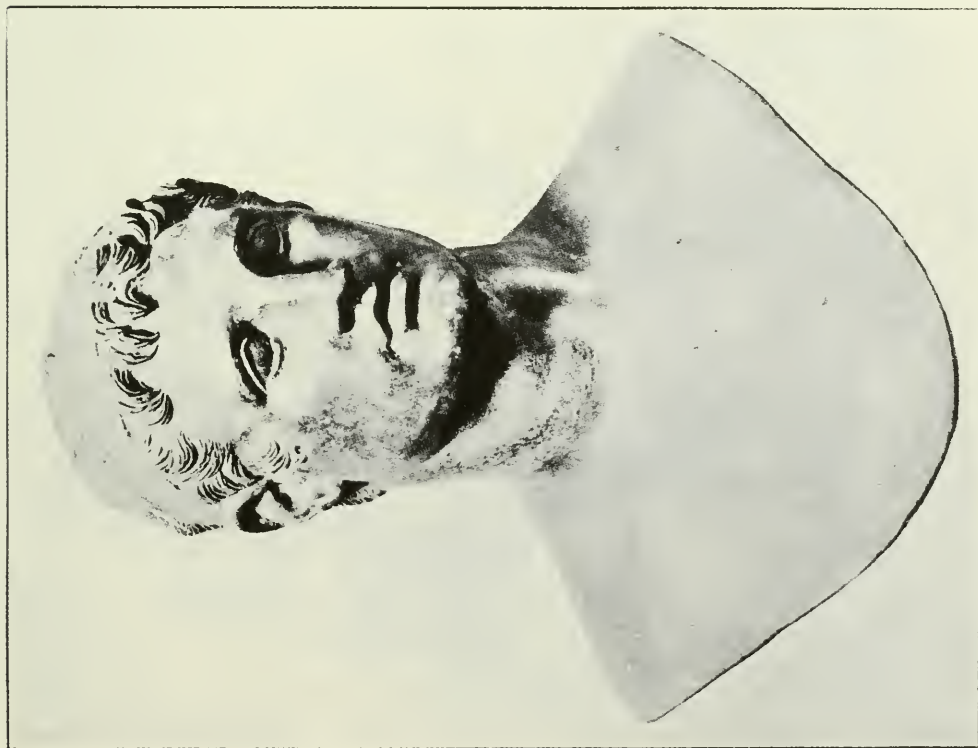
This head is certainly not a royal portrait. From its style it belongs to the fifth century and from the rendering of the hair to the Polycleitan School. Furtwängler identifies it as a Heracles after Polycleitus and gives a list of several replicas.

I.—Alexander Balas.

Bronze statue, Museo delle Terme. Helbig,² 1114. Rossbach, *Jahrb.* 1891, p. 69, v. Perseus, 2.



2. SELEUCUS I.



1. PTOLEMY II., PHILADELPHUS ?).



1. ANTIOCHUS VI.



2. UNKNOWN PORTRAIT.



2



4

5



6



7



9

8

9

ATTALID AND SELEUCID COINS.

There is not the slightest likeness between the coin-portrait of Alexander and the profile of the head of this statue. There is also no reason, save that the figure stands in the supposed attitude of 'Lysippus' Alexander with the spear,' for identifying it as a royal portrait. On the contrary it



FIG. 1.—HEAD OF ANTIOCHUS VI. IN THE MUSEO DELLE TERME.

seems to be a Roman adaptation of an athlete statue of the third century B.C.

J.—Antiochus VI.

Marble head, Museo delle Terme. **Pl. IX. 1.** and Fig. 1. Helbig² 1160. Mariani and Vaglieri, *Guida*, p. 84. 10.

Helbig suggests that this is a portrait of a Hellenistic prince as a νέος Διόνυσος. This head has two prominent characteristics, thick, curly, satyr-like hair, and a youthful, chubby, laughing countenance. These are also present in the coin portraits of the young Antiochus VI. with whose features the individual lines of this head agree, and who was called Διόνυσος, and was the first Seleucid to have that inscribed as a title on his coinage. It is not surprising to find a portrait of Antiochus VI. in Rome. It is known that Tryphon on his usurpation after murdering Antiochus sent to Rome a golden

Nike to win recognition. But the cautious Senate while accepting the gift entered as the donor the murdered Antiochus VI.¹⁸

K.—Antiochus VII.

Marble head, Jacobsen collection. Arndt 578–580. Schreiber, *Studien ü. d. Bild. Alexanders*, p. 289, note to p. 136.

There is in my opinion no likeness between this head and the portrait of Antiochus on his coins. Schreiber gives no arguments to support his conjecture; and in any case it is more than doubtful that it is a royal portrait at all.

L.—Antiochus VIII.

(1) Bronze statuette, Naples, Inv. 126170. *Notizie degli Scavi*, 1901, p. 300 (as Perseus, good Roman work). Hauser, *Phil. Woch.* 1903, p. 157. Schreiber, *Studien ü. d. Bild. Alexanders*, p. 272, as Antiochus II.

(2) Marble statue, Munich. Furtwängler, *Beschreibung* 298. Schreiber, *Studien ü. d. Bild. Alexanders*, pp. 82, 275.

The Naples bronze is clearly a portrait; but though there is a fillet round the head, it is in a very unusual position round the crown and also has chin straps. Consequently I am more inclined to believe it an athlete statue as Hermes with his head bound with thongs like the head in the Capitoline Museum.¹⁹ Further the profile has hardly any likeness to the coin-portraits of Antiochus.

Schreiber's identification of the Alexander Rondanini (2) as Antiochus VIII. is, to say the least, startling. Even if it be not Alexander, the statue from its style is clearly derived from a late fourth or early third century original. Besides the Alexandroid rendering of the face is in direct contrast to the naturalistic coin-portrait of Antiochus: and between the profile of the head and the coin-portrait I fail to see any resemblance.

ALAN J. B. WACE.

APPENDICES.

I.—A PORTRAIT OF ATTALUS I.

In the *Journal International d'Archéologie Numismatique*, 1903,²⁰ I published a Pergamene tetradrachm (Pl. X. 5) with a reverse of Imhoof-Blumer Group IV–V, but having on the obverse a head entirely unlike the

¹⁸ v. Bevan, *House of Seleucus*, II. 231.

²⁰ P. 140, Pl. VII.

¹⁹ Helbig ² 426. Brunn-Bruckmann, 527.

Philetaerus portrait. This head I conjectured to be a portrait of Attalus I. Mr. Warwick Wroth however, in a brief notice of my paper,²¹ stated that he believed the head not to be Attalus, but a variety of the Philetaerus head and to be similar to a coin in the British Museum (Pl. X. 5).²² He was willing to admit that the head of Philetaerus might however have been varied to suit the portrait of the reigning king. Mr. Wroth has since seen the 'Attalus' head coin, and compared it with the British Museum coin mentioned. He now, after seeing the coin itself, is of opinion that the head is of unusually fine style and no doubt differs a good deal from the ordinary 'Philetaerus' head. This will be evident on a comparison of the heads on the plate (Pl. X. 1. 4. 3. 2. 7. 8). The series of Philetaerus heads preserve throughout the same characteristic features. The neck is thick and puffy; the eye is small, and overhung by a heavy brow; the cheeks are loose and flat, and the jaw is heavy; the lips are thick and projecting. These features are clearly traceable in the British Museum coin. But in the 'Attalus' head we find on the contrary a large, open eye set deep and looking upward under a strongly modelled brow. The cheeks are hard, the neck is thinner, the lips are drawn in tightly, and the jaw is less prominent. And in contrast to the jovial and sensual but cunning face of Philetaerus, the expression is one of intense, determined energy.

The coinage of the Pergamene dynasts is noted for its uniformity of type; this has been considered due to political and commercial reasons. And when Eumenes II. coined in his own name with his own portrait he changed the reverse type.²³ Should Attalus I. then have changed the reverse type, when coining with his own head? Eumenes I. substituted for the Seleucus head the Philetaerus portrait. Attalus I. altered the reverse type; the shield and inscription changed places and Athena was made to hold a wreath over the latter. And also on one coin of his, the Fox tetradrachm at Berlin (Pl. X. 3), the shield and inscription are both behind Athena. Further Philetaerus on the later coins wears a laurel wreath instead of the simple fillet. I suggested before that Attalus coined with his own head towards the end of his reign. Imhoof-Blumer remarked that considering the length of his reign the coinage of Attalus I. was small. Dr. Gäbler tries to rectify this: he suggests that Eumenes I. coined only with the Seleucus head, and assigns Imhoof-Blumer's second and third groups to Attalus I.²⁴ This seems to me untenable. Soon after his accession Eumenes I. was at war with his uncle's suzerain Antiochus I., whom he defeated at Sardis.²⁵ Antiochus I. died soon after, and Pergamum became independent. It is not reasonable to suppose that Eumenes after defeating the Seleucid king in person should have continued to coin with the head

²¹ *Cl. Rev.*, 1903, p. 475.

²² *B.M.C. Mysia, Pergamum*, No. 36.

²³ *B.M.C. Mysia, Pergamum*, 81. It is usually supposed to have been coined at Syros, but I see no reason why it should not have been struck in Pergamum. Cf. Von Fritze, *Z. f. N.*

1903, p. 118. Cf. Kornemann, *Beitr. z. all. Geschichte* I. p. 89 on the deification of the Attalids.

²⁴ Gäbler, *Erythrä*, p. 52.

²⁵ Strabo, xiii. 4.

of the founder of that line. I would then propose a new arrangement thus:—

Imhoof. Group I. Philetaerus.

Group II. Eumenes I.

Group III. (Philetaerus head with laurel wreath.) Attalus I. after Gallic victories, after 240 B.C.

Fox tetradrachm. Attalus I., *circa* 230 B.C.

Group IV. (Altered reverse.) Attalus I., after final defeat of Antiochus Hierax, *circa* 228 B.C.

Group IV-V. (Grapes.) Attalus I. after 214 B.C. Defeat of Achaeus.

'Attalus' head. Attalus I. after 201 B.C.

By this arrangement the 'Attalus' head falls into place at the end of Attalus' reign. Apart from it there are at least four changes in the type during Attalus' reign. Further it is not the obverse that matters so much as the reverse.²⁶ The Attalid dynasty preserved right through its coinage a reverse directly dependent on the type used by Lysimachus. And coins of Lysimachus continued to be struck for purely commercial reasons by Ephesus, Byzantium, and other cities till the second century B.C. It was not unusual for a ruler who wished to coin in his own name and head to begin with a compromise. This was done by Diodotus of Bactria, who coined with his own head, and the reverse and name of his master Antiochus II.²⁷ And *vice versa* Antiochus I. coined with his father's head;²⁸ and the majority of the Ptolemaic coins bear on the obverse the head of Soter I., the founder of the dynasty. The use of the Philetaerus head is exactly paralleled by that of the portrait of Soter I., for not all the Ptolemaic kings coined with their own portraits. Similarly I believe that Attalus I., when he felt strong enough to stand alone, began to coin with his own portrait, still keeping the same reverse for commercial reasons, and preferred to leave the inscription ΦΙΛΕΤΑΙΡΟΥ for political reasons as indicating no change of policy towards the Asiatic cities: though perhaps his uncle's name as Lysimachus' treasurer had a commercial value in Asia. Eumenes II. returned to the Philetaerus head type, because he had his reputation to make, and his realm was in danger from Antiochus III. But he eventually coined with his own portrait, and a new reverse. Attalus II. for similar reasons preserved the old type. But some day we shall also have a portrait of him perhaps; and it would not be surprising if gold coins of Perganum were to be found.²⁹

²⁶ Cf. the Apollo on the Omphalos type of the Seleucids, and the Ptolemaic eagle. The Phoenician cities even under the Seleucids still struck with an eagle reverse obviously for commercial reasons.

²⁷ *B.M.C. Seleucids*, Pl. V. 7.

²⁸ *J.H.S.* 1903, p. 110.

²⁹ The gem in Paris (Coll. Luynes, 154, Furtwängler, *Gemmen*, Pl. 33, 11), which I previously tried to identify as Attalus, is perhaps judging by the coin a portrait of him. But there are changes in the setting of the eye and mouth; and the omission of the fillet is hard to explain. The British Museum

Since the above was written I have had the opportunity of discussing the points raised with Dr. von Fritze. He believes the Attalus head to be the best portrait of Philetaerus, and does not agree with my proposed re-division of the Pergamene series, but admits that the Attalus head coin was struck towards the end of the reign of Attalus I. To him I owe my knowledge of the Modena replica of the Attalus head (Pl. X. 6) whose obverse is from the same die as my coin. He also informs me there is another tetradrachm of the Fox type at Florence, both obverse and reverse being from the same dies as the Berlin specimen.

II.—SELEUCUS, SON OF ANTIOCHUS I.

Mr. Macdonald has suggested that an unknown head on two Seleucid coins³⁰ inscribed ΒΑΣΙΛΕΥΣ ΑΝΤΙΟΧΟΥ, that from their style and the border of dots belong to the reign of Antiochus I. or his successor, is a portrait of Seleucus the eldest son of that king.³¹ The obverses of these coins are from the same die, and therefore by the same artist. We have

'Philetaerus' gem which Furtwängler said was similar in style to the Paris gem, and perhaps by the same artist, is a forgery. So no assistance towards the identification of the coin portrait is to be obtained from gems. Cf. *Journ. Int. Arch. Num.* 1903, p. 146, Pl. VII. 9, 10. Furtwängler, *Gemmen*, Pl. 33, 10.

³⁰ *J.H.S.* 1903, Pl. I. 6. 7, p. 110. I would refer throughout to this paper by Mr. Macdonald, Bevan's *House of Seleucus*, and U. Wilcken's articles on the Antiochi in Pauly-Wissowa.

³¹ The head on these coins has been identified by Dr. von Fritze as a portrait of Antiochus Hierax (*Troja und Ilion*, p. 563). This is shewn by Mr. Macdonald (*J.H.S.* 1903, p. 110) to be an impossible identification, and he gives us another portrait of Hierax after proving that the head usually called Hierax is Antiochus II. (*J.H.S.* 1903, Pl. II. 1. 3. 4). I feel myself unable to accept this head as a portrait of Hierax, for the simple reason that there is no difference in the features between it and the heads proved by Mr. Macdonald to be Antiochus II. No other supposed portrait of Hierax stands any real test: and yet it is acknowledged that coins must have been struck for Hierax, if only to pay for troops and supplies during his wars against his brother Seleucus II. and Attalus I. The solution seems to me to be simple: no coins were struck with Hierax' own portrait. Mr. Macdonald has shewn (*J.H.S.* 1903, p. 114) that Hierax' supporters, his mother Laodice and her friends, coined with

the head of his father Antiochus II. It seems unnecessary to explain a rather younger-looking head of this king, struck after his death, by urging that because it is young it must be Hierax, especially since his party caused it to be struck. Hierax when his father died was about 16 (Beloch, *Gr. Geschichte* III.² p. 454), and must then have been entirely under his mother's control; this would account for his not coining with his own head when his brother had been driven from Asia Minor after the battle of Ancyra. From 242 to 228 during his struggle with his brother and Attalus he was from 14 to 27: and as he grew older his party's power decreased. He died a fugitive in Thrace before 226 about the age of 28. Hierax probably drew most of his supplies from coinage struck by cities that helped him, such as Alexandria Troas. It is reasonable to believe that these cities in view of Hierax' uncertain position would not have risked their own existence by displeasing the rightful king by coining with his usurping brother's portrait. To continue to strike with the head of Antiochus II. could not displease either brother, whichever eventually proved victor. That these cities in the Troad were but half-hearted supporters of Hierax is proved by their subsequent steadfast loyalty to Attalus (Polybius v. 78). The only evidence that Hierax was made viceroy in Asia Minor by Seleucus II. is Justinus (xxvii. 2. 6). He is not, however, mentioned in the cuneiform inscriptions as such.

to deal then with one die only. On a close comparison of this head with Mr. Macdonald's standard portrait of Antiochus II.,³² the features appear the same. We have not two different persons, but two portraits of one person. The features do not vary; only the method of treating them is different. The eyes in both heads are deep set, but look out straight forward from large sockets. The line of each nose curves out to a point: the lips are thick and project: and in each case the line of the jaw sweeps round to a firm chin. But the treatment of the young king's head differs. The standard portrait is that of a lean, energetic, but sulky-looking youth not yet fully developed. The other head is that of a chubby, disagreeable child somewhat idealized. But even if this identification is not accepted, there are still grave reasons for refusing to acknowledge it as the head of Seleucus. The coins as shewn by Mr. Macdonald were struck in the Troad. Seleucus was associated with his father, and was viceroy in Babylonia as Antiochus I. had been before him. His father's rule as viceroy had been only over the lands east of the Euphrates.³³ There is every reason to suppose that Antiochus I. imitated his father, and made his son viceroy only as regards territories east of the Euphrates. If Seleucus' writ did not run west of that river, why should his head appear on coins struck in the Troad? ³⁴ In the Branchidae inscription³⁵ which is now taken to refer to Seleucus I. and Antiochus I.,³⁶ both *Βασιλεῖς* are mentioned in the heading, but it is Seleucus alone who writes the letter. Similarly a rescript to Erythrae³⁷ dealing with contributions for the Galatian war is written by Antiochus I. alone. Antiochus the young son of Antiochus III. wrote a letter to the citizens of Magnesia ad Maeandrum in his own name.³⁸ But in this letter he makes special mention of his father, and remarks on τὸ πρὸς ἐμὲ ψήφισμα. And further the letter is inscribed on the same pillar as and below a letter of his father replying to a similar letter and an embassy of the Magnesians about the festival of Artemis Leucophryene.

The Sigean inscription,³⁹ which is in honour of a physician for his loyalty towards the *Βασιλεῖς* Antiochus and Seleucus, and for his successful treatment of Antiochus, probably, as Wilcken suggests, refers to Antiochus I. and his son. But it is no evidence that Seleucus had any authority in the Troad. Nor does the decree⁴⁰ of the Ionic Confederation addressed Τοῖς τε βασιλεῦσι Ἀντιόχῳ καὶ Ἀντιόχῳ καὶ τῇ βασιλίσσῃ Στρατονίκη prove that the junior *βασιλεύς* had authority outside of his own special territories. To judge by the coin inscriptions, Antiochus I., when acting as his father's viceroy in Babylonia, was not full *βασιλεύς*. The coins

³² *J.H.S.* 1903, Pl. I. 3, p. 108. Cf. also Pl. I. 10.

³³ App. *Syr.* 62.

³⁴ Mr. Macdonald suggests a possible answer to this, *op. cit.* p. 111.

³⁵ *C.I.G.* 2852 = Dittenberger,¹ *Syll.* 170, Hicks, 175.

³⁶ v. Wilcken in Pauly-Wissowa *s.n.* Antiochus.²¹ Haussoullier, *Rev. Philol.* 1898, p. 121, 1900, p. 256.

³⁷ Hicks,¹ 164.

³⁸ Kern, *Inscrift. v. Magnesia a. M.* 18, 19.

³⁹ Hicks,¹ 165. Dittenb. *Syll.*¹ 157.

⁴⁰ Michel, 486.

are inscribed ANTIOΧΟΥ ΣΕΛΕΥΚΟΥ ΒΑΣΙΛΕΩΣ,⁴¹ Antiochus, son of king Seleucus. That this translation is correct is proved by the inscriptions which in every case use the plural, βασιλεῖς. And Pliny⁴² mentions *Demodamas Seleuci et Antiochi regum dux*: this is clearly a translation of Δημόδαμας Σελεύκου καὶ Αντιόχου βασιλέων στρατηγός. The right of coinage was far more of a royal prerogative than mere titles on honorary inscriptions. Antiochus seems to have coined under license from his father. There are coins extant however struck in the types of Seleucus I.⁴³ bearing a different inscription ΒΑΣΙΛΕΩΣ ΣΕΛΕΥΚΟΥ ΑΝΤΙΟΧΟΥ (Pl. X. 9). These coins are all of Indian provenance; they are of Bactrian fabric, and were all struck at the same mint, probably Dionysopolis or Nysa. Six⁴⁴ rightly attributed these to Seleucus the son of Antiochus I. Seleucus made himself full βασιλεύς, and coined in his own name, styling himself son of Antiochus merely for form's sake, before declaring himself fully independent. These coins explain why Antiochus decreed his eldest son's death. John of Antioch says⁴⁵ ὅτι 'Αντιόχου . . . υἱὸς Σέλευκος καὶ 'Αντίοχος ὁ ἐπικληθεὶς θεός· ἀλλ' ὁ μὲν Σέλευκος, ἐπιβουλεύειν ὑποπτευθεὶς τῷ πατρί, κατακτείνεται. Trogus⁴⁶ merely mentions *Ut in Syria rex Antiochus cognomine Soter, altero filio occiso, altero rege nuncupato, decesserit*. We now have a fairly clear idea of the nature of Seleucus' crime. He not only meditated but had actually begun to carry out a plot to rebel against his father. When this occurred is uncertain. Our authorities for dating this event would be the cuneiform tablets from Babylon. And these, even if rightly read, contradict one another. They give us the following list of kings for the reign of Antiochus I.:

- Seleucid Era. 37. Antiochus and Seleucus.⁴⁷
 38. Antiochus and Seleucus.⁴⁷
 39. Antiochus and Antiochus.⁴⁸
 43. Antiochus and Seleucus.⁴⁹
 46. Antiochus and Antiochus his son.⁴⁸
 47. Antiochus, the great king, and Antiochus.⁴⁸
 49. Antiochus and Seleucus.⁴⁸

Lehmann,⁵⁰ however, has recently shewn that the heading for the year 39 should read Antiochus and Seleucus. We must then assume that Seleucus met the fate he deserved in 268–267 B.C., as the heading for the year 43

⁴¹ Gardner, *Num. Chr.* 1880, p. 189. Six, *do.* 1898, p. 226.

⁴² *Nat. Hist.* vi. 18.

⁴³ *Obv.* Bearded Zeus laurel wreathed. *Rev.* Athena driving quadriga of elephants.

⁴⁴ Six, *Num. Chr.*, *loc. cit.* Cf. Gardner, *loc. cit.*

⁴⁵ *F.H.G.* iv. 538, 55.

⁴⁶ *Prol.* xxvi. Malalas says Seleucus died young, p. 205.

⁴⁷ *Zeitschr. f. Assyriologie*, vii. p. 226.

⁴⁸ *do.* viii. p. 108. For year 59 one tablet gives as king Antiochus, but another tablet of the same year gives as king Seleucus: and in year 59 Antiochus II. was sole king.

⁴⁹ Schrader, *Keilinschrift. Bibliothek* iii. 2, p. 136.

⁵⁰ Lehmann, *Beitr. z. alt. Geschichte*, 1903, p. 526, 1.

dates from Adar (= March 268). Since Antiochus' marriage with Stratonike took place about 294-293, Seleucus, if he was born as early as 292, was 17 in 275. Unfortunately, however, there are no tablets for the earlier years of Antiochus' reign, so we cannot say whether this was Seleucus' first year as viceroy or not. Perhaps he was not of age till 275. His younger brother Antiochus, who was 40 when he died in 246, was therefore 20 when made viceroy about 266. His immediate promotion shews he was of age. Also Ptolemy Epiphanes, who was betrothed to Cleopatra, daughter of Antiochus III., about 198, did not marry her till 193, when he was about 18.⁵¹ Very possibly Seleucus' appointment as viceroy was part of Antiochus' preparations for the first Syrian war, which was already begun in 274, though in late autumn 275 there was still peace.⁵² In connexion with this war to secure an alliance between Magas and Antiochus, Apame, the latter's daughter, was married to Magas not later than 274. Apame's daughter, Berenike, was of marriageable age when Magas died (258-250), therefore Apame was probably at least 16 in 274.⁵³ If she was older than Seleucus, he would have been barely 16 when made viceroy in 275: this seems hardly probable, though it is possible. Antiochus III. made his son viceroy when only 12, and Antiochus, son of Antiochus IV., was only 3 when declared viceroy. Still in spite of the fragmentary nature of the history of the period, we have been enabled to patch together enough to give us a passing glimpse of the character of Seleucus, who fell a victim to his own unfortunate ambition, as might have been expected from a grandson of Demetrius Poliorketes.

A. J. B. W.

⁵¹ Mahaffy, *Emp. of Ptolemies*, p. 306.

⁵² Lehmann, *op. cit.* p. 498 *sqq.*

⁵³ Her sister Stratonike married Demetrius II. of Macedonia: there is no reason to suppose with Wilcken (Pauly-Wissowa *s.n.* Apame 3) that Apame was the younger because Eusebius

(I. 249) mentions Stratonike first. All the dates as regards Stratonike's marriage and divorce and her husband's birth are conjectural. Cf. Beloch, *Gr. Geschichte* III.², p. 93, *sqq.*

NAUKRATIS, 1903.

IN the spring of 1903 I was enabled by a grant from the Craven Fund of the University of Oxford to return to the site of Naukratis. Having left certain parts of the Mounds unexplored in 1899¹ because they were either too high, or too sodden with the infiltration of water, I intended to attack them whenever the *sebakh* diggers should have removed the unproductive upper layers, and a season of low Nile level had occurred. The results of this campaign, the last, I expect, that will be undertaken at Naukratis, I embody in the following Report, discussing at the same time certain points on which new light can be thrown from other sources.

A.—THE SITE.

The identification of the site of Naukratis, so brilliantly made by Mr. Petrie, has never been questioned. All scholars agree, moreover, with his contention that Naukratis lay to west, not east, of the Great or 'Agathodaemon' Nile of Ptolemy. Mr. Petrie, however, maintained that the town did not lie actually on that river, but on a derived Canal. His grounds were these. (1) Herodotus (ii. 97) says that *during the Inundation* there was water passage from Naukratis to Memphis under the Pyramids: but that the usual way lay by the apex of the Delta (*i.e.* by the river itself): (2) Strabo (xvii. 23), after mentioning the Nitriote Nome in the course of a geographical survey, which proceeded from north to south, says *πλησίον δὲ καὶ ἐνταῦθα πόλις Μενέλαος ἐν ἀριστερᾷ δὲ ἐν τῷ Δέλτα ἐπὶ μὲν τῷ ποταμῷ Ναύκρατις*. This statement, said Mr. Petrie, in that it placed the town on the left bank of the river, was the result of a confusion in Strabo's mind. For, in fact, Naukratis was on the *right* of the Canopic Nile as one ascends. Strabo should have said on the left of a *derived Canal*.

In this interpretation of his authorities, the arguments for which failed at the time to convince his colleague, Mr. Griffith,² Mr. Petrie seems to have

¹ See *B.S.A.* vol. v. pp. 26 ff.

² *Nauk.* ii. p. 83. I do not agree with Mr. Griffith's argument either, though I come to his conclusion. I see no reason for placing

Naukratis on the East of the river, not supposing 'Delta' as used by Strabo to mean only the land between the rivers: and the fact that Ptolemy put the *Nome* of Naukratis on

been wrong. Herodotus in expressly stating that the route viâ the Pyramids existed *only in Inundation time*, and that the usual route was by the river, supplies no ground for assuming the existence of a canal. Nor does Strabo. In the passage quoted above, the latter, I have no doubt, meant by ἐν ἀριστερᾷ, to left, not of the river, but of the Nitriote Nome and Menelaus, to which he had just conducted his readers. From that digression into the western desert he returns eastward (*i.e.* to the left hand) to the Delta (by which he probably understood, as we do now, not only the area between the Niles, but the whole fan of irrigated land) and clearly states that Naukratis lay on the River. To the ordinary authorities, which support him in this, may be added the Coptic recital of the *Martyrdom of the Blessed Epimachus*, edited and translated by F. Rossi,³ wherein the Saint is brought to 'the place called Naukratis and there remained on the river.' On the great *stela* of Nectanebo discovered upon the site of Naukratis in 1899 (published by G. Maspero and commented on later by Messrs. Erman and Wilcken⁴) it is enacted that the stone be set up in Naukratis on the bank of the *Ann* ('*new*') stream, *i.e.*, without doubt, on the bank of the Great River.

B.—HISTORY.

(1) *Foundation.*

The question whether Naukratis existed before the settlement of Greeks there by Amasis (circa 570 B.C.) is still open: but a new aspect has been given to it by facts not sufficiently considered in the original controversy between Messrs. Petrie and Gardner on the one hand⁵ and G. Hirschfeld on the other,⁶ or in the *résumé* of M. Mallet.⁷ Attention was drawn repeatedly in *B.S.A.* vol. v.⁸, as a result of the excavations of 1899, to the distinctively Egyptian character of the southern half of the Mounds; and among other inferences, the suggestion was once more made⁹ that there was a distinct Egyptian town on the site which existed before 570 B.C. The first part of this suggestion found almost immediate support through the discovery of the *stela* of Nectanebo, already mentioned (it came to light almost in the centre of the southern area called by Mr. Petrie 'The Great Temenos'); for this speaks of the place under an Egyptian name, *Pi-emrô*,¹⁰ adding 'called Naukratis.' But an inscription of the fourth century has,

the East does not justify Mr. Griffith in saying that although Ptolemy expressly stated the town was on the west, he was really picturing it to himself as on the east! It is worth notice that, in the Revenue Papyrus of Philadelphus, there is no Naukratite Nome, but Naukratis itself is attached to the Saitic, evidently as a place not in the Nome, but near it. (Σαίτης σὺν Ναυκράτει.)

³ *Pap. Copti del Musco Torinese* in Mem. R. Accad. Scienze Torino, 2nd Ser., vol. xxxviii. pp. 271-298.

⁴ *C. R. Acad. Inscr.* 1899: Cairo Museum

Cat.: *Zeitsch. für Ägypt. Sprache* 38, part 2, p. 127.

⁵ See esp. the former's letter to the *Academy*, July 16, 1887; and the latter's remarks on p. 71, and elsewhere of *Nauk.* ii.

⁶ *Rh. Mus.* 43, p. 209.

⁷ *Mém. Mission du Caire*, 1893.

⁸ See esp. pp. 45-48.

⁹ It was made in Smith's *Dict. Geog. s.v.* and was repeated by Mallet, *op. cit.* p. 150.

¹⁰ Erman, *l.c.*, but according to Maspero, *Pa-meraiti*.

of course, but little bearing on the second part of the suggestion, *viz.* that such a town existed in the sixth, seventh, or earlier centuries.

The excavations of 1903, however, while fully confirming the distinction of the site into a northern Greek quarter and a southern Egyptian quarter, also tended to support a suggestion first made by Mr. Petrie,¹¹ that the south part of the site was the earliest occupied. The thick burnt bottom stratum, which Mr. Petrie dated before all other human remains on the site, was found wherever we sank pits between Mr. Petrie's 'Scarab Factory' and his 'Great Temenos,' but nowhere either north or south of this area. In a series of pits, which I pushed southward from the southern edge of the central excavated area up to and even within the southern limit of the 'Great Temenos' area, the basal mud occurred at an average depth of 5 feet. Upon it, varying from one to two feet in thickness, lay this burnt stratum of charcoal and ash, containing no sherds but rough 'kitchen' ware in which I fail to detect any necessarily Greek character: while the two undisturbed feet of deposit superincumbent contained a little painted white-faced Naukratite pottery (such as that which lies in the bottom stratum on the north) and black-figured sherds, and abundance of fragments of figurines and amulets in the same glazed 'sandy ware' as that described by Mr. Petrie (*Nauk.* i. p. 14). The uppermost stratum was naturally a hotchpotch of disturbed stuff, among which, however, occurred only a very small amount of Greek sherds. This region has been the scene of a conflagration, which devastated but a small area, and may either have been accidental or kindled with intent to effect a certain clearance.

The glazed 'sandy ware' objects, which are the rarest of finds at the north end of the Mounds, but on the south the most frequent, at whatever point a pit is sunk, occurred with these scraps of the earliest painted Naukratite vases, but also at a lower level than the latter were ever found. The beginning of the fabric must therefore be dated before that of the local painted pottery of Greek manufacture. It had been a flourishing industry for some time before the latter began, but it flourished in the south of the site only.

To show how the classes of remains differ at the two ends of the site, I quote from my day book that on May 1st and 2nd, while digging exclusively in the southern quarter, Mr. Edgar and I found five Egyptian bronze figurines: fragments of three faience bowls with incised patterns and hieroglyphics: two stone figurines, Egyptian style: one alabastron: seventy-three glazed sandy ware Egyptian cult figurines or amulets: and seven painted Greek sherds. Whereas in the three weeks during which we dug out the north end, and there found so much Greek painted ware that after wholesale rejection we had to pack nearly a thousand specimens, we came across no Egyptian bronzes; no incised faience; and under twenty objects, all told, in glazed 'sandy ware.'

It is not necessary to insist further on this distinction between the north

¹¹ *Nauk.* i. p. 21, but somewhat unaccountably contradicted by Mr. Gardner, *Nauk.* ii. p. 34.

and south towns, between Pi-emrô and Naukratis. It was sufficiently set forth in *B.S.A.* v., and indeed was indicated in the *Memoirs* of Messrs. Petrie and Gardner themselves. But, if it be conceded also (as seems inevitable) that the Egyptian end of the site was the earliest inhabited, then the arguments of those gentlemen, claiming an earlier date than 570 for the Greek settlement, on the ground that there is evidence of prior settlement on the site itself, lose their cogency: for that evidence refers, not to the Greek, but to the Egyptian town. I need only call further attention to Mr. Edgar's argument, stated in *B.S.A.* v. p. 49, that the glazed 'sandy ware,' if not Egyptian, was probably a Phoenician and certainly not a Greek fabric—an argument which has not been assailed.

Although, however, the Egyptian town was the earlier, the contention that Greeks were settled on some part of the site before 570 is not disposed of, if it can be supported on grounds independent of the earlier remains in the southern Mound. The literary argument stands where Hirschfeld, Gardner, and Mallet left it, except for this fact—that if there were a previous Egyptian town, Herodotus' phrase in regard to Amasis' settlement, *τοῖσι ἀπικνευμένοισι ἐς Αἴγυπτον ἔδωκε Ναύκρατιν πόλιν ἐνοικῆσαι*, becomes intelligible, without assuming the previous presence of Greeks (cf. *Nauk.* i. p. 4 and ii. p. 71). The epigraphic argument of Mr. Gardner has not been re-asserted during the past five years against the destructive criticism of Mr. Edgar (*B.S.A.* v. p. 52), and has not received any support from the inscribed sherds found in either of the later excavations.

On the whole, however, though agreeing with Hirschfeld that the statement of Strabo (p. 801), owing to his use of the word *χρόνος*, may refer to so long a space of time as to be quite reconcileable with the Herodotean date, I see no adequate reason for rejecting the previous presence of Milesians on a small part of the site later devoted to a general Foreign Concession. There is some, if very little, independent positive evidence for it (of an inferential sort) in the statement which Jerome repeated from Castor, and in the tale of Polycharmos, cited by Athenaeus (xv. 18); while there is no direct evidence proving a negative.

(2) *Vicissitudes.*

(a) Mr. Petrie's argument that the town suffered a great general disaster early in the sixth century (which he ascribed to the troubles attendant on the succession of Amasis) was based on (1) the existence of the burnt bottom stratum, (2) the sudden cessation of the scarab manufacture at the opening of the reign of Amasis. It is greatly weakened by our observation (which nothing in his own excavation-notes contradicts) that the burnt stratum is limited to a small area; and by Mr. Edgar's probable suggestion that the scarab manufactory, being a Phoenician affair, ceased (if indeed it did cease)¹² on the concession of a part of the site to the Greeks

¹² The argument from the absence of Amasis' one: for Necho's name is equally wanting. cartouches is, as Mallet showed, a very weak

by Amasis. For this concession may reasonably be supposed to have excluded other foreigners. On the whole, therefore, it is unnecessary to assume any more cataclysmal event at this period than the disturbance of other aliens by the Greeks settled under the terms of Amasis' concession, which I still regard as a measure of compulsion and restriction rather than favour.

(b) The argument stated in *B.S.A.* v. p. 36 that there was no subsequent interruption of Naukratite prosperity was not supported by the observations made in 1903. Mr. Gardner, who judged, from the state in which he found votive objects distributed round the southern Aphrodite Shrine, that 'some calamity befell the city' (during the Persian invasion under Cambyzes) seems to have been right, although other causes might have led to the breaking and casting forth of dedicated vessels. There is clear evidence that the structures in the Northern Temenos, which I name the *Hellenion*, were restored practically from the foundation in the first half of the fifth century. (See below, p. 114.) The first explorers argued from their failure to find good red-figured pottery. This negative observation has been weakened by the sherds unearthed in 1899, and still more in 1903. Red-figured ware of several periods and of all qualities, including the very finest, occurred in the northern *Temenos*; as also did the later varieties of black-figured ware. But imported red-figured ware of the early period of severe style was, in fact, found very rarely; and this fact points to an interval of commercial stagnation having taken place in the first half of the fifth century before the visit of Herodotus.

(c) A general Ptolemaic restoration, involving the rebuilding of the northern shrines on artificial mounds of sand, heaped over their ancient sites, is certain. But, as was said in *B.S.A.* v. p. 37, this may be supposed to have been due not to the city having fallen to ruin, and much less to its having lain in ruin for any length of time, but simply to the well known Ptolemaic policy of renovating, almost refounding, cities and shrines throughout Egypt as a justification of the new Dynasty. This, as before suggested, had to be done at Naukratis in a thoroughgoing way, probably owing to rising damp. As will be stated more in detail when we come to speak of the *Hellenion*, a belt of unproductive sand was found to overlies remains ranging from the first half of the sixth to the latter half of the fourth centuries, many of which, notably those of an architectural nature, had obviously been bedded down to receive the sand. Above this belt were found the pavements and walls of a connected series of chambers, in which nothing pre-Ptolemaic occurred.

(3) *Extinction.*

The disappearance of Naukratis has certainly been dated by Mr. Petrie too early. His argument that, after a period of revived prosperity under the Ptolemies, the city decayed rapidly under the Empire, is probably stated too strongly. The decay was only relative. A community, which could produce men of letters and philosophers in the third century A.D., was still vigorous;

and that it was by no means so extinct as Mr. Petrie maintained, by the end of that century, is amply proved by the inclusion of Naukratis in lists of important towns and bishoprics of much later date, *e.g.* the Greek lists of Hierocles (early 6th cent.), and Leo and the Coptic List of Episcopal Sees, published (from two MSS.) by M. Amélineau as fourth appendix to his *Géographie de l'Égypte à l'Époque Copte*.¹³ It is mentioned in the stories of two Coptic martyrdoms,¹⁴ and a merchant of the place plays a part in Heliodorus' *Aethiopica*, written late in the fourth century. The name does not occur, however, in any of the later Coptic *Scalae* (see *Appendices* to Amélineau *op. cit.*), and we may therefore infer that Naukratis had lapsed by about the tenth century to a village, or rather to a group of villages, of which Nekrash, Gayif, and Nebireh survive.

C.—TOPOGRAPHY.

(1) *The Hellenion.*

Whatever the date of the first settlement by Greeks, no one has ever ascribed the foundation of the *Hellenion* by the nine cities of Asia to an earlier period than 570. The only question concerns its position on the site and its identification with existing remains. It may incidentally be remarked that Mr. Petrie, in his original publication, constantly assumed two things in regard to it which the text of Herodotus does not warrant, (1) that it was called the *Pan-Hellenion*; (2) that the market, presided over by the same nine cities, was held in its *Temenos*.

Mr. Petrie located the *Hellenion* in an area at the south end of the site, which he called the 'Great *Temenos*,' and drew certain historical inferences from the remains there observed, which were accepted by Mr. E. A. Gardner, and by scholars generally up to 1899. In that year, as the main result of my first campaign on the site, I advanced the view that the *Hellenion* had nothing to do with the 'Great *Temenos*' at all, but was to be found in another *Temenos* at the north end of the Mounds—in the Greek quarter, in fact, not the Egyptian (*B.S.A.* v. pp. 42 ff.). In 1903, I was able (thanks to an unusually dry season) to continue the exploration of the northern *Temenos*, as far as the extreme limits of uncultivated land: but before the results are described a word must be said about the rival site, the 'Great *Temenos*.'

(a) *The 'Great Temenos.'*

One of my principal objects in returning to the site of Naukratis in 1903 was to probe for foundation-deposits which might show under what Pharaoh was built the immense Wall, described and mapped by Mr. Petrie as surrounding his 'Great *Temenos*.' In the event I spent a week searching for its north-west corner, the only one whose position on Mr. Petrie's plan lay clear of cultivation or houses. I may say at once that not only did I never succeed in finding that corner, but—a most unlooked-for result—I never

¹³ Cf. also *ibid.* p. 271

¹⁴ v. *supra*, p. 106, and Amélineau p. 271.

found any clear evidence of the existence of a Great Wall of any kind. As Mr. Petrie's benchmarks were no longer recognizable, and his plan had been somewhat roughly made, I could not lay down on my own chart the position of the invisible corner with any precision; and I had to make wide casts for it from various sides. I first tried to hit the outer face of the north wall of his 'Temenos' by a series of pits pushed up from the north: then I tried to get the inner faces both of that wall and the western wall by a similar method from within the 'Temenos': then I tried for the outward face of the western wall, beginning far outside the possible area on the west, and advancing eastwards. In this way I have no manner of doubt that I completely traversed in several places the lines on which both the north and west walls ought to have been. But I never found any solid mass of brickwork of one-fourth the dimension ascribed by Mr. Petrie to his 'Great Wall.' What I did find was a much ruined complex of buildings, the lower of which were made of bricks of the dimensions recorded by Mr. Petrie in his Temenos Wall; while the upper, surviving as one upstanding block in the very centre of the line in which the north wall of the Temenos was to be looked for, showed beneath their lowest courses a belt of earth containing pottery (including a few bits of Greek wares) not earlier than the fifth century B.C. The broadest wall actually lighted upon in these trials was one running north and south, measuring sixteen feet across: it formed the west side of a group of chambers, which had the character of a dwelling house. On every occasion on which I found a wall, chambers eventually opened on either hand of it, before a quarter of the requisite solid breadth had been revealed.

Since the cemetery mound on the south-west, which Mr. Petrie believed to be a surviving part of the Wall, was still there to guide me, it is not possible that I can have missed altogether the line of both the west and north walls of the Temenos as plotted by Mr. Petrie. Nor can it be supposed, in view of the antiquity which Mr. Petrie claimed for his Temenos Wall, that I was digging below its original site, and opening out chambers antecedent to its foundation. Therefore, with all diffidence (for it is almost impossible in such a case to prove an absolute negative), I must state my conviction that (for once) Mr. Petrie was mistaken in the nature of certain masses of construction, which exist on three sides of the area called by him the 'Great Temenos'; and that these represent not a solid wall of brickwork, but an aggregate of house remains, piled up round a lower area, wherein lay the Egyptian temples and public buildings, of which one contained the Nectanebo *Stela*, and another was excavated by Mr. Petrie himself and regarded as a Greek fort. This area was, in fact, the central area of the town, Pi-emrô. I make this suggestion with the better assurance since it does not appear from Mr. Petrie's own narrative that he ever tested the nature of these masses of construction by systematic digging. He seems (p. 24) to have relied mainly on the statement of local Arabs that there had been within their memory mounds on three sides of this area, as high as that surviving mound on the south-west, which he did not excavate for fear of disturbing modern graves. These other mounds, he says, were already reduced in 1884 to the

general level. As for the high mound on the south-west, still surviving, this also appears to me, who have often examined it, not to be a solid mass of brickwork at all, but a nucleus of chambers, such as that I found on the north-west. Mr. Petrie may have been deceived by the outcrop on its inner face of some continuous house-wall, now removed. In a word, I venture to assert not only that there is nothing answering to the Hellenion in this part of the mounds, but no Great Temenos at all. Probably there existed here small precincts of Egyptian deities (to one of which the Ptolemaic pylon explored by Mr. Petrie gave access), surrounded by a high ring of mud-brick houses.

I trust it will not seem presumptuous if I say that at the time and under the circumstances in which a greater digger than myself explored this area, such a mistake as I have supposed was well nigh inevitable. Indeed the mistake (if such it was) was acquiesced in by all Mr. Petrie's coadjutors and by myself in 1899. Although I had then every reason to transfer the Hellenion from this area, its superficial resemblance to a Temenos made me accept it without question as one great enclosure. In 1884, the deposit was much deeper over all the area. To follow the faces of the supposed enclosure walls could only have been done at great expenditure of time and money: to cut a test trench across or sink a pit upon the surface was probably to be confirmed in error: for the former was as likely as not to hit a broad wall which would continue along the axis of the trench; the latter to descend on to solid brickwork. Starting with the presumption that a great Temenos, other than those he had found in the north centre, must exist on the site, and having no reason to distrust a southern situation for this, Mr. Petrie could hardly help finding it in the vast southern quadrilateral hollow.

(b) *The Northern Temenos.*

The first part of the campaign of 1903 was devoted to the rival site on the north, the Temenos which I discovered in 1899, and identified with the Hellenion, because of its locality, the great size of its outer walls, and the occurrence within it of dedications not only to various individual gods, but to the *Θεοὶ τῶν Ἑλλήνων*, not commemorated elsewhere on the site. The second exploration confirmed the conclusions of the first in three important respects. (1) I laid bare remains of the east wall of this Temenos, finding it to be of a breadth comparable to that already found on the west. (2) I again found dedications to the 'Gods of the Greeks,' and others in individual honour of Aphrodite, and (for the first time) Artemis. (3) I showed that the series of small chambers, opened in 1899, was continued eastward right across the Temenos by others belonging to the same periods, and similarly containing remains of dedicated pottery, the formulae on which seemed to indicate that distinct groups of chambers were devoted to distinct deities.

The excavations of 1899 had been suspended in their eastward course on the parallel bounding the horizontal series of squares IV (II on the 1899

plan) on the east; and beyond that line, two or three trials only had been

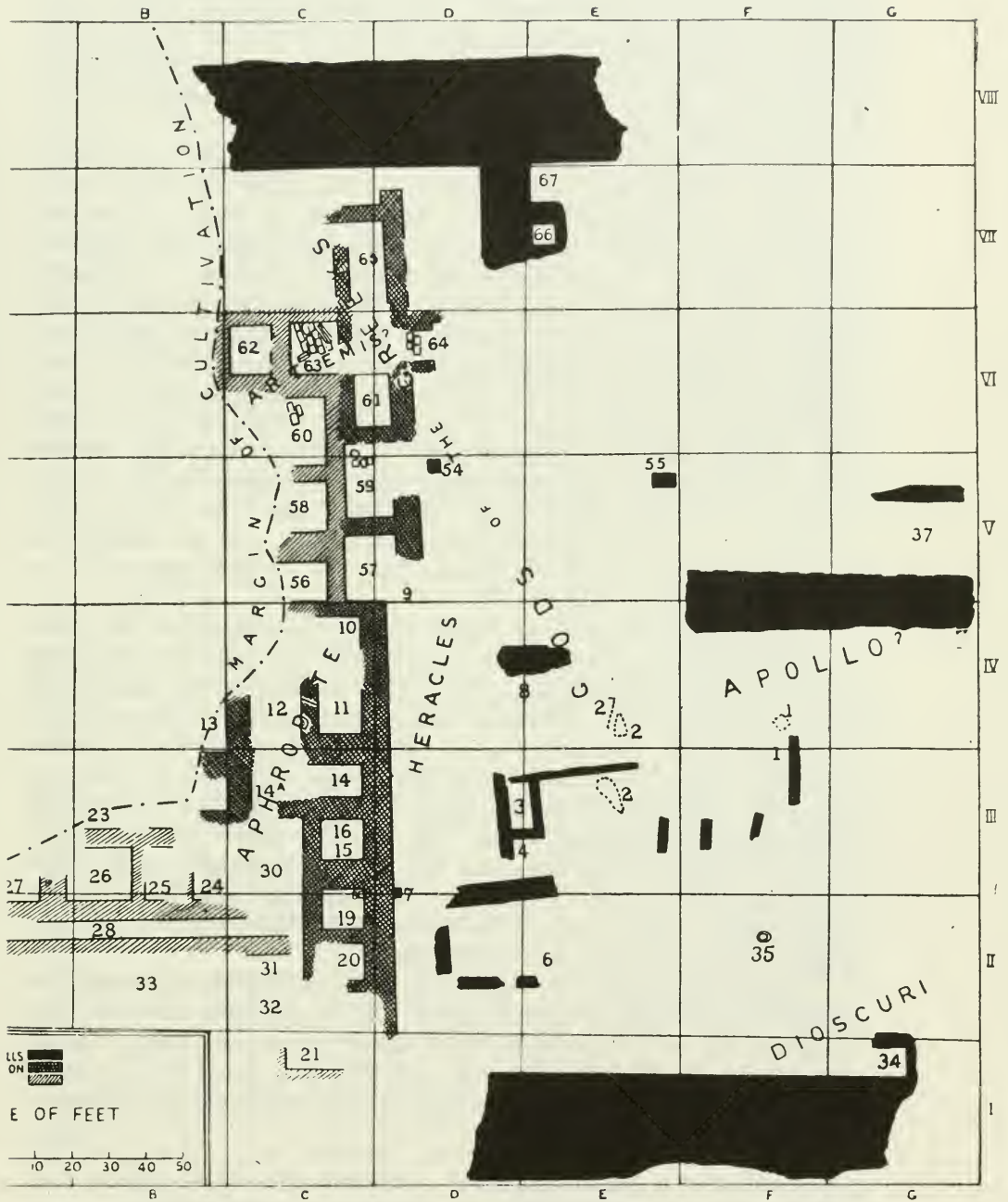


FIG. 1.—PLAN.

made which showed fragments of wall to exist (marked 54-55, 37 on the Plan,

Fig. 1). In 1903 I took that line¹⁵ as the left flank limit of an advance from south to north. It was useless, however, to begin this advance from any points nearer the south wall of the Temenos than those lying on the parallel dividing the vertical series of squares F and E; for the area in the interval had been scooped out by *sebakhîn* during the past four years below the original surface of the basal mud. Nor indeed were any but isolated patches of deposit left in the E and D squares.

The men on the extreme right flank of my line found themselves at once upon a broad wall, running north and south, the east face of which could not be clearly determined. A breadth of at least 25 feet was established, but this is by no means the whole dimension. This was unquestionably the eastern wall of the Temenos or Temple; for beyond it (as proved by repeated trials) dedicated sherds were not found, and the deposit seemed to contain only remains of houses. This wall, being based on the mud, belongs to the first construction. Its bricks are 14 inches long, and from 7 to 5½ inches broad. To the same period belong all the very scanty remains of walls found up to the parallel dividing E and D. Every later structure has been¹⁶ cleared away by *sebakhîn*, and heaps of their refuse lie on the mud, from which some terracotta moulds and several bits of dedicated pottery, including the 'Herodotus' base (*Inscr.* No. 6), were recovered. In a small patch of undisturbed deposit, just west of 66, were found the fragments of the Horsemen Vase (Pl. V. 1) at a height of 10 inches above the basal mud.

The fragmentary range of chambers, next encountered on the north, was embedded in deeper patches of deposit, and the spaces 57, 59, 61, 64, 65, are all, in their existing disposition, to be ascribed to the same period as the earlier part of the Aphrodite Shrine, which was uncovered to west of them in 1899, *i.e.* the earlier part of the fifth century. For a uniform interval of deposit occurs under the lowest courses of their walls, averaging two feet in thickness and containing great quantity of sherds of early local and imported black-figured wares. Not till well above their foundation levels did red-figured ware occur, and then in fair abundance; *e.g.* the additional fragments of the 'Στησίχορον' kylix (p. 120) were found in the south doorway of 64 just above the bedded blocks there shown on the plan, which probably underlay a lost threshold stone.

This lowest stratum of deposit and the structural change which took place immediately after the latest period that it represents were seen best in chamber 63, which in its actual form, like all the range in which it occurs (10, 56, 58, 60, 63, 62), belongs to the Ptolemaic reconstruction. Here, after clearing the actual chamber, whose walls were preserved to a height of

¹⁵ In the lack of surviving benchmarks of 1899, the filled-in well, marked 35 on the plan, served for a guide to my former bearings. So much had the area all about it been worked over again by *sebakhîn*, that the mouth of this

well, which had been left in a depression, was now elevated in a small mound.

¹⁶ Except one fragment of concrete paving 2 ft. above the mud level, which belongs to the first reconstruction.

about three feet, and finding in it red-figured ware ranging from the Graeco-Roman period back to the third century B.C., fragments of Hellenistic terracottas and half a plaster antefix mask, we had (as in 1899) to hack through some feet¹⁷ of unproductive muddy sand, into which the foundation courses of the Ptolemaic walls were sunk two feet. Under this a stratum of squared stones emerged, so carefully bedded down as to look like a pavement, but showing no signs of footwear. Among these were two large fragments of rough stone gutters: several stones concave on one side, which looked like parts of a well-mouth; and the small *stela*, shown in Fig. 8. This was bedded down face upwards among, and flush with, the other blocks. In treatment it is exactly parallel to the 'Warrior Relief,' found hard by in 1899 (*B.S.A.* v. Plate IX. and p. 65), and, like it, was possibly a painted gravestone. Its mixed Egyptian and Greek style is interesting. Lying immediately under this bedding of stones was an Athenian silver didrachm of the archaic style of the early fifth century, and at precisely their level, but at a spot where the stone stratum failed, was found a terracotta representing the Infant Herakles. Some good red-figured fragments also occurred, at the same level. These stones proved to overlie two feet of early deposit like that observed to south of them—full of early local wares of many varieties, including several white-faced scraps with traces of painted dedications.

We were able both here and in 62 to clear the surface of the basal mud thoroughly, before too much water filtered in: but in 60 and 58 this could not be so satisfactorily done. In 58, however, we succeeded in uncovering a patch of pavement of thin concrete, laid within two inches of the basal mud, and 5 feet 10 inches below the well marked floor level of the Ptolemaic restoration. On the Ptolemaic floor¹⁸ of chamber 10 was much fallen wall-plaster of brilliant blue.

The chamber last named, in which were found several Aphrodite dedications and (beneath the Ptolemaic floor) small terracotta heads of the type discovered so abundantly hard by on the west, seems to have belonged to the *Aphrodite Shrine* to west of it. The only intelligible dedications (besides those to 'Gods of the Greeks' which occurred in 57 and 63), found in the eastern chambers, were two (in 63 and 62, both in the lower stratum) showing parts of the name Artemis (*Inscr.* No. 8 and another not figured). From so small a number it would be unsafe to name this group the *Artemis Shrine*, more especially as one terracotta and two heads seem rather to indicate an ascription to Herakles, dedications to whom were found not far off in 1899 (*B.S.A.* v. p. 32 and *Inscr.* Nos. 3, 33, 84).

This eastern part of the buildings within the Temenos is continuous with the western, and, like it, has been entirely reconstructed in the early Ptolemaic period by builders who first heaped a mound of sand over bedded-down remains of earlier structures, belonging to the early fifth century.

¹⁷ This sandy stratum varies from 7 to 2 feet in thickness at different points.

¹⁸ Made of a concrete of lime, pounded brick, and pebbles. It was $\frac{2}{3}$ of an inch thick.

These last had been erected upon remains of still earlier buildings, coeval with the first settlement of Greeks on this northern part of the site, a few traces of whose walls and pavements alone survive. The whole mass of remains belongs to an edifice, contained through all restorations within the same great enclosure walls, and apparently devoted to the worship of several individual gods and the 'Gods of the Greeks' as a whole. This it cannot be doubtful was the Hellenion which Herodotus saw, and in which possibly he dedicated the vase whose base, bearing his name, came to light in 1903 (*Inscr.* No. 6).

D.—INSCRIPTIONS (from the Hellenion site unless otherwise stated).

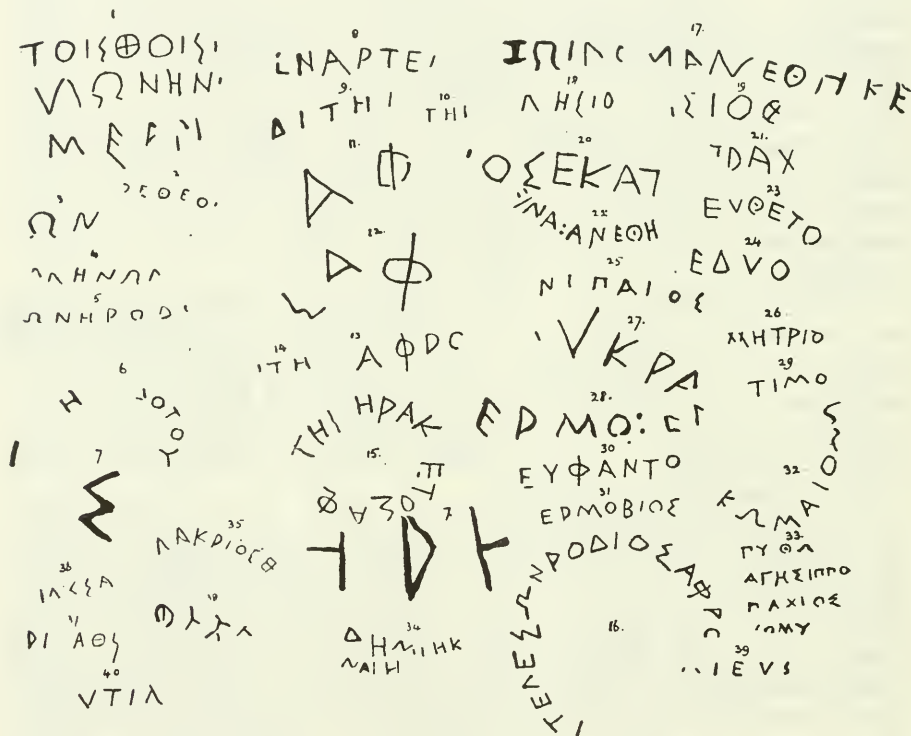


FIG. 2.

- Fig. 2. No. 1. Τοῖς Θ(ε)οῖς [τῶν Ἑλλή-
νων HN[.
με ἀ[νέθηκεν.
2. ἀνε]θε θεοῖς τῶν Ἑλλήνων.
3. θεοῖς τῶν Ἑλλήνων].
4. θεοῖς τῶν Ἑλλήνων].
5. Θεοῖς τῶν Ἑλλήνων Ἡρόδο[τος? (Not from
Hellenion.)
6. Ἡ[ρο]δότου.

7. . . . ης Ἡρη[ι] : from untouched earth immediately S.W. of Mr. Petrie's 'Heraeum.'
8. ἀνέθηκεν Ἀρτέ[μιδι] ? The order of the words strongly favours the restoration of the name as Artemis.
9. Ἀφρο]δίτη[ι].
10. Ἀφροδί]τη[ι].
11. Ἀφ[ροδίτηι.
12. ς Ἀφ[ροδίτηι.
13. Ἀφροδ]ίτηι.
14. Ἀφροδ]ίτη[ι]
15. Ἡράκ[λ]ε(ι)τος Ἀφ[ροδί]τη[ι].
16. Τελέσων Ρόδιος Ἀφρο[δίτηι.
17. Ζώιλο[ς] μ' ἀνέθηκε. (Painted.)
18. Μι]λησί(ο)υ. (Not from Hellenion.)
19. Μιλη]σί(ο)υ θ[εοῖς κ.τ.λ. ?
20. ος Ἐκατ[αίου].
21. ?
22. εἰνα ἀνέθη[κε].
Women's dedications are very rare.
23. Εὐθέτο(υ).
24. ?
25. ?
26. Δη]μητρί(ο)υ.
27. Να]υκρα[τίτης] ? (Not from Hellenion.)
28. Ἑρμο(υ) ἐμ[ὲ ἀνέθηκεν. (Painted.)
29. Τιμο[κράτης] ? (Not from Hellenion.)
30. Εὐφάντο(υ).
31. Ἑρμόβιος.
32. Κωμαῖος. (Only known as a surname of Apollo.)
33. Πύθω[ν. (Not from Hellenion.)
Ἀγήσιππο[ς].
Πάχιος ?
.
34. ? Εὐ]δημῖη κ[. . . . Ἀθη]ναίη[ι] ?
35. Complete. Λάκριος θ' ? cf. *Nauk.* ii. No. 819.
36. ?
37. ?
38. Cypriote. *mo-ta-to*-? Cf. *B.S.A.* v. No. 114 and *Nauk.* ii. No. 864.
39. ? Φωκ]αεύς. Cf. *Nauk.* i. No. 666. (Not from Hellenion.) On a fragment of *b.f.* kylix in finest style.
40. Μ]υτιλ[ήναιος. (Not from Hellenion.)

This is a selection, mainly from the Hellenion site, where dedicated

sherds have most significance. About forty other inscribed sherds were found, many of them being scraps with only a letter or two. These it is not worth while to publish; but I may mention that four, obtained from children who raked over the rubbish heaps in the centre of the site about the Temenos of Apollo, contained part of dedications to that god. An amphora neck with a single Phoenician character, *Shin*, painted on it was found in the Hellenion. Two fragments of inscribed marble were brought to me. They read:

(a) White marble, extreme length 152. (b) Coarse marble, broken on all sides. Lettering of third century B.C.

| | |
|--|-------------|
| C/////////I<A ΑΝΑΓΡΑΦΗΝ ΤΟΝΤΑΜΙΑΝΤ ///////////I'Σ | ΙΝΓ ΝΕΙΝ |
|--|-------------|

An ostrakon was sold me on the site, but I suspect it was imported from elsewhere. It is broken on all sides. It reads:

ΕΥΡΕΘΗ
 ΔΕΝΟΒΛΑΒΕΣΤΩ
 ΡΥΜΒΕΚΑ
 ΟΝΤΕΠ

D. G. H

E.—POTTERY.

(By Miss H. L. Lorimer.)

[PLATES V.—VII.]

THE excavations recently conducted at Naukratis have yielded nothing in the way of pottery that is, strictly speaking, new: considering the immense quantities of sherds found in the course of the earlier diggings, it would have been surprising if they had. None the less the fresh finds deserve mention, and that on several grounds. Recent discoveries in other quarters have shed light on the origin of some of the fabrics in question; and though these results are generally known, it is worth while to resume them in an account of what seems likely to be the last excavation of Naukratis. The discovery of late Attic r.f. ware in relatively large quantities, and the consequent possibility of dating with some precision the instructive gap in the series of Attic imports, are new facts, and have their bearing on the political history of the town. Finally, some few of the fragments are of sufficient beauty or interest to deserve publication on their own merits.

The first steps towards dividing out the manifold fabrics of Naukratis among the various elements of its population were taken by Dr. Boehlau in his book *Aus Ionischen und Italischen Nekropolen*. The 'Rhodian' ware of Naukratis he claims on convincing grounds for Miletus, dividing it into an earlier style which does not employ incised lines, and a later, which combines incised with unincised zones of decoration. The excavations in Samos which form the starting point of his treatise have put beyond all doubt the Samian origin of the Fikellura fabric abundantly found at Naukratis and elsewhere. Of the mixed multitude, therefore, that inhabited the Graeco-Egyptian town, Milesians and Samians have come by their own. Simultaneously with the appearance of Dr. Boehlau's book Dr. Zahn published¹ a couple of vase fragments from Klazomenai and pointed out their close resemblance to the later type of pottery from Tell Defenneh. Dümmler² had already drawn attention to the affinity of this latter fabric with the Klazomenian Sarcophagi, which are in all probability of somewhat later date: Zahn's sherds, which he considers to be contemporaneous with the Defenneh ware, supply several fresh points of contact. Among the most important characteristics common to the two styles are:—(1) the practice of painting in white immediately on the clay ground, and then surrounding the white wash with a brown outline, at least where precision of form was desired, as in the case of the human face, (2) the rendering of inner markings by the same brown paint on white and by incised lines on black paint, (3) the frequent use of rows of white dots, generally between two incised lines, by way of ornament, (4) the form of the horses and their ornamental harness. The Klazomenian fragments also belonged to a vessel, or vessels, of the hydria type common at Tell Defenneh.

It may, therefore, be regarded as fairly certain that the Defenneh ware is Klazomenian, probably imported, as Zahn holds, from the mother city. The first excavations at Naukratis yielded some fragments of this ware, but so few that both Professor Petrie and Dümmler regarded them as imports from Tell Defenneh, then generally taken to be the home of the fabric. Numerous sherds were obtained in the last diggings, and must be connected with the Klazomenian element resident in Naukratis. But as they agree minutely with the Defenneh ware, it is more probable that they too were imported than manufactured locally. It is true that not more than one or two fragments from Naukratis exhibit the elaborate technique of the best Defenneh ware, with its curious combination of outline, silhouette, and incising. B 102. 28 in the British Museum, on which are preserved parts of the figures of a hoplite and archer, is the best example of this style, which is only employed for careful and highly finished work. The large majority are of the inferior type also abundantly represented at Tell Defenneh, which has abandoned the painted outline and employs white more sparingly, incises inner markings on black and white paint alike, and not infrequently makes an incised outline round the entire silhouette. It retains, however, the

¹ *Ath. Mitth.* 1898, p. 38.

² *Jahrb.* 1895, p. 35.

ornamental rows of white dots, the horse-trappings and saddle-cloths, and the type of male head with the great spreading beard characteristic of the more elaborate vases. No distinction can be drawn between the Naukratite and Defenneh specimens of this ware.³ The clay is grayish, as is also the case with Zahn's Klazomenian fragments, differing from the warm reddish colour of the best Defenneh vases.

Several of the fragments now in the Ashmolean Museum come from the shoulders of hydriae, and shew the method of construction in an interesting way. The neck, which joins the shoulder at an angle, was made in a separate piece and inserted in the body, the junction being covered by a clay fillet which was afterwards painted red. The same process was used in the case of the fragment in the British Museum 128. 1, which comes from Tell Defenneh and belongs to the inferior class of ware: the larger and finer Defenneh vases were made all in one piece, and the clay fillet which is characteristic of the whole series is merely ornamental.

How much farther the process of parcelling out the motley fabrics of Naukratis among her equally motley population may in the future be carried, it is of course impossible to predict.

Among the Attic b. f. fragments pieces of good early style are not wanting: ware of the Kleinmeister type however predominates, as in the case of the first excavations. But the trade relations of Athens and Naukratis, which must have lasted through a considerable period, were suddenly broken off. The total number of r. f. fragments of the severe period which the site of the latter town has yielded is exceedingly small, and those belonging to the Epictetic circle do not number more than two or three. Of those of severe style in the Ashmolean several seem to belong to a single vessel, the 'Στησίχορον' kylix in the style of Douris, a fragment of which was published in the *Annual* of the British School, vol. v. One of the more recently found pieces fits on to this fragment, which is therefore reproduced with this addition (Pl. VI. 5). Late r. f. ware on the other hand is abundant: there are some fine pieces, but most of it is of very inferior quality. Pieces of the still later stamped black ware were also found.

The event which broke off intercourse between Athens and Naukratis towards the end of the b. f. period, but before the new style had appeared, can have been no other than the invasion of Egypt by Kambyzes; and the subsequent troubles of Athens herself may well have prevented the resumption of relations until the best days of the severe period were over.

The most interesting of the new fragments is that reproduced on Plate V. 1. It appears to be the wide funnel-shaped mouth of a bowl similar to Nos. 1 and 3 on Plate X of Naukratis, Pt. I, and is light and thin for its size. The clay was first covered with black glaze, and the field was then divided into panels by vertical lines of white and red paint enclosing a white zigzag line and dots. In each panel was painted in white the figure of a

³ Endt's statement (*Ion. Vasenmalerei*, p. 13) that incised outlines do not occur on the Defenneh ware is incorrect.

man on horseback armed with a spear. The inner markings were put in with red paint and the whole background was washed over with the same colour: but to avoid coming in contact with the very absorbent white, the artist left a broad black margin round the figures. Groups of white dots were painted on the red background, and under the horses there are remains of a vegetable ornament, also in white. The division of the field vertically in the geometric manner is exceptional at Naukratis. This piece, both by the colouring employed and by the lightness of the fabric, recalls across an interval of many centuries the 'Kamares' ware of Crete, as does also, with curious fidelity, the polychrome internal ornament of the commonest early native painted ware of Naukratis. The resemblances may be accidental, but they are noteworthy when the singularity of the Cretan fabric is considered.

Of the remaining fragments the most noteworthy are the following:—

Plate VI. 1: fragment covered with cream glaze: head in purple paint: inner markings given by reserved lines so fine as almost to produce the effect of incising. The head wears a close-fitting cap surmounted by a snake: a cloth hangs from the cap behind. On the famous Caeretan hydria at Vienna (Furtwaengler und Reichhold, *Vasenmalerei*, Pl. LI) Busiris wears a very similar cap, undoubtedly intended, as Furtwaengler points out, to represent the uraeus head-dress of an Egyptian king. The present instance is a more faithful representation, for it preserves the hanging cloth, which is omitted on the hydria. This fragment may well belong to a scene from the Busiris myth. The way in which the cloth flies out behind suggests that the figure was in violent action.

Plate VI. 2. Fragment of unglazed clay: two figures and part of a third forming a procession. The first (fragmentary) carries a thyrsus with a ribbon attached; the second, a vase and wreath; the third, a thyrsus and what seems to be a wreath. The two complete figures also wear wreaths.

Plate V. 2. Shoulder of hydria of Defenneh type: three male heads.

Plate V. 3. Fragment of a flat plate decorated with zones of animals. The only complete animal resembles a jackal, and is represented in the act of turning, with a degree of realism very unusual in so conventional a scheme of ornament.

Plate VI. 3. Ware of Defenneh type. Satyr of Ionic type, playing double flute.

Plate VII. 1. Fragment found in the Hellenion: hawk perched on top of column or corner of building. Cf. *Tanis*, Part II., Pl. XXV. 1.

Plate VII. 2. Severe r. f. style: head of Dionysus, wreathed and slightly bearded: leopard on shoulder. In the field $\sum_{\text{X}}^{\text{III}}$ (i.e. some such name as [*Αλ]εξίς) and vine leaf.

Plate VII. 3, 4, 5. Severe r. f. style: the first two in all probability belong to the 'Στησίχορον' kylix (cf. Fig. 6 *infr.*) and the third closely resembles them both in style and in the thickness of the clay.

Plate VII. 6. A beautiful specimen of fine r. f. style: warrior with spear: inscription ΙΟΛΕΟΣ: palmette ornament.

Plate VI. 4. Fragment of a white kylix in the style of Euphronios, represents the combat of Herakles and Apollo over the tripod. Portions of this kylix were found in the earlier diggings and are now in the British Museum (v. Hartwig, *Meisterschalen*, Pl. L). The new fragment was bought on the site by Dr. von Bissing (to whom thanks are due for a drawing from which the illustration in the text was made) and presented by him to the Museum at Munich; the British Museum has since acquired it by exchange.

Plate VI. 5. The 'Στησίχορον' fragment with the addition of the new pieces.

H. L. L.

F.—ACTUAL STATE OF THE SITE.

I HAVE implied that I consider the site of Naukratis to be now exhausted. This statement refers to the uncultivated part of it, the 'Mounds' proper, all whose superficial rubbish heaps I have had raked over repeatedly. There also I have cleared out all ancient wells I could find; but in 1903 I got nothing from any of these, beside rough pottery, except a seated phallic terracotta, headless, and two stone horses and a stone 'sphinx' figure. The original town undoubtedly extended slightly to north and east of the limits of the actual *Kum*, and I do not say that in the course of agricultural operations objects may not yet come to light, just as did the Nectanebo *stela* in 1899. But in this small extent of irrigated land very little can be expected to have survived. As for the *Kum* itself, I have satisfied myself that the deep temple areas are now all explored, and the shallower mounds to north-east, south-east, and west contain domestic remains very scanty in quantity and poor in quality. I also sank trial pits in both the hamlets which adjoin the site on the north. That immediately contiguous with the north-west corner of the Mounds seems to be built on an empty stratum of muddy sand some twelve feet thick: and so also, in spite of Mr. Gardner's observations (*Nauk.* ii. p. 11), did I find the second hamlet to be (er-Rashowan). My pits on the edges of its mound went down into masses of broken pottery and rubbish of all sorts, evidently ancient refuse heaps: my pits in its central part penetrated the same muddy sand as in the other hamlet without revealing the vestige of a burial. Both this mound and that on which the hamlet south of it stands seem to me to be remains of the same old canal or river embankment, which crops up again under another hamlet further to north-west. I strongly suspect that the Nile flowed in antiquity past Nekrash and down the east face of Kum Gayif, crossing the eastern part of the area supposed to be a great Temenos by Mr. Petrie, wherein, near the bank, stood the Nectanebo *stela*. Thereafter it

swept round the northern end of the mounds, past the Hellenion and *between* the two nearest northern hamlets, and so went away north-westward, leaving on its right bank the modern Ezbet er-Rashowan.

D. G. H.

G.—MINOR ANTIQUITIES.

(By C. C. Edgar.)

MR. HOGARTH'S last brief campaign at Kum Gayif was as fruitful as the former excavations in small antiquities of various kinds, corresponding to the variety of nationalities in the ancient town. Many of them were found in the trenches and wells—in which case they could mostly be dated approximately by external evidence—but the greater part, as usual, came from the small private hoards of the *sebakh*-diggers. The painted vase-fragments have been studied by Miss Lorimer. I shall add a few remarks on some of the other objects, more especially on those which were taken as toll by the Cairo Museum and which I can describe from direct observation.

1.—Unpainted Pottery.

In *Tunis*, Vol. ii. Pls. 33–36, Mr. Petrie has published a large number of vases from the Stratopeda, partly Greek, partly Egyptian, and partly hybrid. The pottery illustrated below is of the same mixed character.

Fig. 3 shows a group of more or less complete vases from a well which Mr. Hogarth excavated in 1899. The two short-necked amphorae in the back row belong to a type which is characteristic of the Phoenician sphere of influence. It was in vessels of this form that the wine of Phoenicia was imported into Egypt, and that the water of the Nile travelled out in turn into the desert: οὕτω ὁ ἐπιφοιτέων κέραμος καὶ ἐξαιρεόμενος ἐν Αἰγύπτῳ ἐπὶ τὸν παλαιὸν κομίζεται ἐς Συρίην. Some of those which are found in Egypt have Phoenician inscriptions on them. The one to the left in the illustration has three large letters painted in red on one side, but in this case they are Greek. The four larger jugs in the second row are typically Egyptian: note the rude Bes-head on one of the middle ones. The two smaller jugs are more Greek in style, though a similar form is found elsewhere in Egypt (*e.g.* Cairo Mus., *Cat. Gén.*, No. 3031). As regards the date of this group it should be noted that the well in which they were found was faced with bricks, whereas the wells containing archaic Greek pottery were lined with large cylindrical tiles (much like* the Mycenaean well at Phylakopi). Freiherr von Bissing, one of the few archaeologists who have studied the whole history of Egyptian pottery, tells me that in his opinion the native vases in the above group are not earlier than Cambyses, and



FIG. 3.

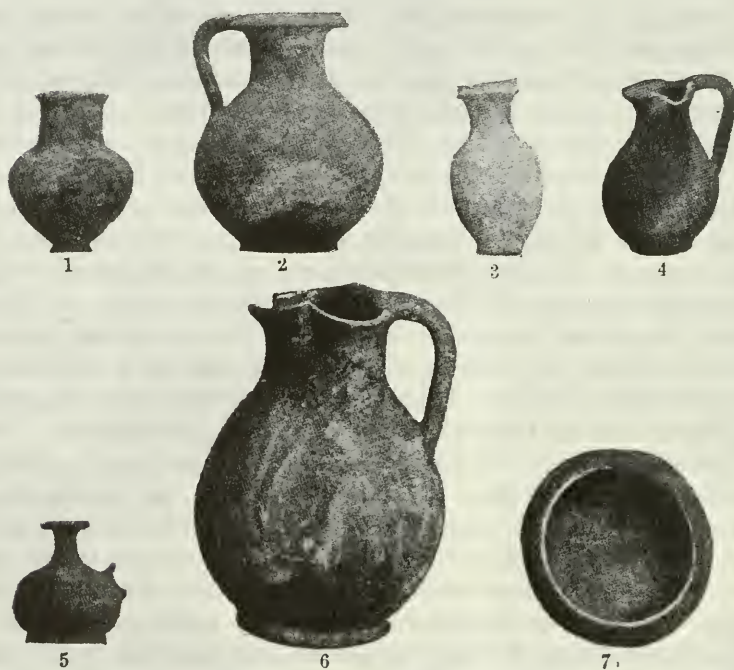


FIG. 4. (Scale 2 : 11.)



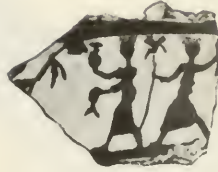


POTTERY FROM

NAUKRATIS.



1



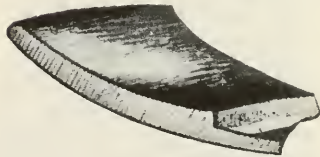
2



3



4



5

POTTERY FROM NAUKRATIS.



POTTERY FROM NAUKRATIS.

probably not later than Alexander. The form of the large amphora points to the same period.

The contents of another well, excavated in 1903, are shown under Fig. 4. Nos. 1 and 3 are native types. Nos. 4 and 6 are typically Greek, but are made of ordinary Egyptian clay without any decoration. No. 5 is a black-glazed Greek vase. No. 7 on the other hand has a polished red surface. This well also seems not to have belonged to the pre-Persian town. It probably dates from the fifth century.

The next group, Fig. 5, comprises a few entire pots which were found in the neighbourhood of the supposed north-west corner of the Great



FIG. 5. (Scale 2 : 11.) No. 1 has had a handle, attached vertically.

Temenos wall (see Mr. Hogarth's article, p. 110 f.). They may range from the seventh to the fifth century, but most of them are probably nearer the earlier limit: the few painted fragments which were got from the same trenches belonged to this period. They are made of ordinary red Egyptian clay, except No. 2, which is of light-coloured ware and is decorated with brown zones round the shoulder: this, as I learn from von Bissing, is a later Saitic type of vase. Nos. 1 and 3 may be compared with *Tanis*, ii. Pl. XXXV, Nos. 41 and 43. A vessel similar to No. 4 was found by Mr. Petrie at a level corresponding to the first half of the fifth century (*Naukratis*, i. p. 22). No. 5 has an inward-projecting rim, a ledge-handle on the inside, and a round hole, the purpose of which is not clear, on the opposite side rather low down (cf. *Naukr.* i. p. 42 and *Tanis*, ii. Pl. XXXIV. No. 26). All these vessels are Egyptian. The large amphora (Fig. 6) on the other hand is a foreign type and was probably not made in

Egypt. The handles are flat. There are remains of letters on the shoulder in broad red lines, apparently Greek. This is another specimen of the vessels in which wine was imported into Egypt from the Aegean and the Orient. A third type, common in Cyprus as well as at Naukratis, will be found figured in *Tunis*, ii. Pl. XXXIII. No. 6.

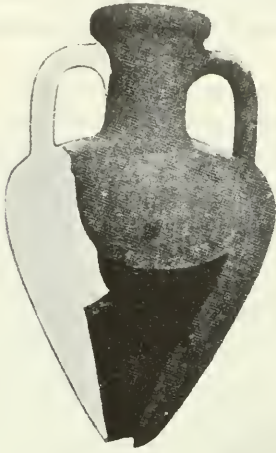


FIG. 6. (Scale 2 : 11.)



FIG. 7. (Scale 2 : 11.)

The two vases shown in Fig. 7 come from the neighbourhood of the Hellenion. The *askos*, which has a ring-foot, is made of light-coloured clay. The other is of ordinary Egyptian ware: it has a flat top with a small hole in the middle, and tapers to a pointed base.

2.—Sculpture.

The little relief figured below (Fig. 8) was the largest piece of sculpture found in the last excavation. It is a rectangular block of limestone, 32 × 28 cm., with roughly flattened back. Its original destination is uncertain. Whatever it may have been intended for, it had afterwards been taken and used in the construction of what was probably a small shrine in the Hellenion. The few vase-fragments found below the floor of this building were all early, none being later than the sixth century; those above the floor included some pieces of red-figured Attic ware.

In one respect the work is akin to Egyptian art. Fat men with walking-staffs were a favourite subject in Egypt, the most famous being the so-called *Sheikh el Beled* in the Cairo Museum. On the other hand the style is not at all Egyptian: the pose is archaic Greek and the body is rendered in comparatively correct profile. As the surface is worn a good deal, especially about the head, the details are rather obscure. He seems to have worn a short garment, but it is difficult to make out.

The figure is in low flat relief with rounded edges. Another limestone relief from Naukratis representing a warrior with shield and spear, which was found in 1899 and which, like the present work, seems to have been used in the construction of a shrine in the Hellenion, is still flatter and has much sharper, square-cut edges.¹ I thought at the time that it was a finished work of peculiar style, but this seems to me now less probable. The nearest parallel that I know of is a relief of a winged Egyptian goddess—equally flat and with still sharper edges—which was found along with some models and moulds from a sculptor's atelier at Memphis, and is in all probability an unfinished study.² Possibly the warrior relief is the same sort of thing.



FIG. 8. (Scale 1 : 4.)

Among the minor stone objects which are characteristic of the site, one of the most common is a representation of a naked woman lying on a bed, perfectly stiff and straight, with a child at right angles to her feet. The child is sometimes omitted. The woman usually lies on her left side with her left arm across her waist, sometimes on her back with her arms by her sides. The coiffure is always Egyptian, and indeed the whole figure is Egyptian work of a low class. Mattress and pillow are sometimes indicated, but more often left to the imagination. For specimens of the different varieties I refer the reader to *Naukr.* i. Pl. 19 and *B.S.A.* vol. v. Pl. XIV.

¹ *B.S.A.* vol. v. Pl. IX.

² In the Cairo Museum: *Catalogue Général*, No. 33413. Here and there in Egyptian tombs

and temples one finds imperfectly finished reliefs of similar appearance, e.g. in the mastaba of Ptahhotep at Sakkara.

Mr. Hogarth's excavation produced the usual crop of these figures, some of which were found by him in the trenches.

Statuettes of the same type, some of them much more elaborately sculptured than the Naukratite examples, are fairly common in Egypt. Several are said to have been found in tombs, and it was perhaps for the requirements of the dead that the type was first invented. To place a statuette of this sort in the tomb of a dead relative was symbolic of providing him with a wife for the other world—a less barbarous form of piety than killing his widow. The marble idols which are found so frequently in the cist-tombs of the Cyclades are good examples of the same practice. With regard to the Egyptian statuettes M. Mallet, together with M. Maspero,³ has proposed a further explanation. As in Egypt the dead man was identified with Osiris, the appropriate consort for him would be a corresponding embodiment of Isis. M. Mallet thinks therefore that these small naked figures represented Isis rather than a mere human being. A point in favour of this view is that one or two of them wear the uraeus-circlet appropriate to queens and goddesses. The whole subject, however, needs closer study on the part of Egyptologists. One would like more evidence and information about their use as burial offerings.

One finds at Naukratis another class of naked female figures, carved in exactly the same style as the above-mentioned: a specimen from the recent



FIG. 8a.

excavation is shown in the accompanying illustration (Fig. 8a; see also *Naukr.* i. Pl. XIX.). These figures are usually known by the name of Baubo. Baubo, according to the Orphic hymn, was the hostess of Demeter at Eleusis, and tried to amuse her guest by the same sort of gesture which the women of Egypt are said to have used on their way to the great festival at Bou-bastis.⁴ M. Mallet believes that the limestone statuettes really refer to this legend, and that the type was introduced into Egypt by the Greeks of Naukratis. But it is very doubtful whether there is any connexion between the Naukratite figures and this

particular Greek myth. More probably the 'Baubos' had the same general significance as the other group of female figures, expressed in a still cruder image. We cannot say whether they (or the other type either) were used as burial offerings, as the necropolis of the period to which they belong has not yet been discovered. But as so many specimens of both types

³ Mallet, *Les premiers établissements*; Maspero, *Guide to Cairo Mus.* (Eng. ed.), p. 296. Just lately there has come into the Museum from Memphis a figure of this sort holding a small Apis against her bosom.

⁴ Herodotus ii. 60, αἱ δὲ ἀνασφονταὶ ἀνιστάμεναι. There are many Graeco-Egyptian terracottas in which this action is represented, but the figures which are commonly identified with Baubo are undraped.

have been found scattered about the town (apparently not on the sacred sites), they at least seem to have been in request among the living inhabitants. It is very possible that they were regarded as charms, as indeed they are at the present day.

Except in a very few cases Mr. Petrie found no evidence for the dating of these statuettes. They seemed to him to belong to the sixth, fifth, and fourth centuries: one extremely rude figure he assigned to the end of the fifth. The recent excavations have thrown a little more light on this point. The 'Baubo' figured above was found in undisturbed ground near the supposed N.W. corner of the 'Great Temenos' in a distinctly early patch, most of its contents that could be dated belonging to the sixth century. In a neighbouring trench one or two of the 'child-birth' figures were obtained amid similar deposit. They may have gone on being manufactured for a long time without undergoing much change in style, but at any rate there is little doubt that they were common and popular in the sixth century B.C. In M. Mallet's opinion the 'child-birth' figures are in all probability Greek imitations of Egyptian types. It is possible that the individual workmen may have been Greek, or partly Greek, by birth. But however rude the style may be, it remains essentially Egyptian: several of the 'child-birth' statuettes from other parts of Egypt are rendered with an equal degree of carelessness, and one finds a similar type of head on some other minor Egyptian works. The 'Baubos' too are of the same character.

The small 'horsemen,' of which sufficient specimens have been already published (*Naukr.* i. Pl. 19 and *B.S.A.* vol. v. Pl. XIV),⁴ were no doubt made in the same workshops as the female figures. Mr. Petrie found one at Defenneh which he dated to the seventh century (*Tanis*, ii. p. 71): there is at least good reason for putting it before the middle of the sixth. One of those from Naukratis has a Greek inscription on one side which is probably a good deal later than this (*B.S.A.* vol. v. Pl. IV, No. 58), but no doubt the manufacture of them lasted over a long period. The type in this case is certainly a foreign one. It is to be compared with the terracotta cavaliers of the archaic period, especially those from Cyprus. There are in Cairo certain terracottas from the neighbourhood of Boubastis representing mounted warriors with sharp-crested headgear and Asiatic beards.⁵ There is also in the same Museum a small four-horse chariot in limestone, done in exactly the same style as the Naukratite horsemen, and very possibly a Naukratite work: here again we are reminded of those Cypriote and Phoenician terracottas in which the same subject is represented. I may also call attention to another work of similar foreign character, a little limestone group of a bearded man and a youth reclining at table: it comes

⁴ The riders are not always so incongruously small as on the published examples. On Graeco-Egyptian terracottas the child Harpokrates is often represented on horseback, but I do not think the small Naukratite cavaliers were intended, at least originally, as images of Har-

pokrates. I regard them rather as local, semi-Egyptian reproductions of an imported type, like the charioteer mentioned in the text.

⁵ I have lately seen fragments of exactly similar figures at Kum Gayif, and the same type occurs at Memphis and Bonto.

from Sais and has been published by M. Daressy in the *Annales du Service*, vol. ii. Pl. II. The small head published below, Fig. 9, is superior in style to the works just cited and is probably an imported object from Cyprus: it has been part of a limestone statuette. It would be interesting to collect all the traces of Cypriote and Phoenician activity in Egypt. Certainly the part played by Cyprus in the development of Naukratis was very important.

Another group of limestone objects, very characteristic of Naukratis, consists of small phallic figures. These are probably in great part of the same age as the preceding types. A terracotta specimen was obtained along with the archaic horsemen from Boubastis mentioned above. They are often represented playing on some musical instrument, and some of them wear the side-lock of childhood.⁶ There is no reason for thinking that the type



FIG. 9.



FIG. 10. (Scale 3 : 4).

was introduced into Naukratis from Greece. The style, such as it is, is Egyptian. In Leemann's *Acg. Monumenten*, vol. i. Pl. XVIII., illustrations are given of a number of phallic figurines of which No. 1466 is very like the Naukratis group which I speak of. The site, however, has produced

⁶ In this connexion it is worth noting that many of the later terracotta images of Harpokrates have a phallic character. The intrusion of this element into the cult of the child-god has not yet been traced or explained.

The Naukratite figures are to some extent illustrative of a passage in Herodotus, ii. 45: ἀντὶ δὲ φαλλῶν ἄλλα σφί ἐστὶ ἐξευρημένα, ὅσον τε πηχναία ἀγάλματα νευρόσπαστα, τὰ περι-

φορέουσι κατὰ κόμας γυναῖκες, νεῦον τὸ αἰδοῖον, οὐ πολλῶ τέφ' ἔλασσον ἐν τοῦ ἑλλου σώματος· προηγέεται δὲ αὐλός, αἱ δὲ ἔπονται ἀεῖδουσαι τὴν Διόνυσον. There is a large terracotta of Egyptian style in the Cairo Museum (belonging to a group mentioned later on) which represents a procession of this sort: the chief personage holds a musical instrument and his phallos is supported by four women.

a great quantity of indecent statuettes of various ages and in various materials.

Fig. 10 is a small plaster model of an Egyptian king's head which I picked up on a visit to Naukratis in 1901. Similar models are common enough in Egypt, and several others have been found at Kum Gayif.⁷ This one, however, is particularly interesting. Unlike most of the others it shows the upper part of the royal hood with the uræus in front. While the face is practically finished, the ears and uræus are merely roughed out. It is evidently a cast, made in a single, open-backed mould; and the state of the unfinished parts shows that it has been taken from one of those soft limestone models which one sees in Egyptian collections, and which usually have incised squares and measurements on the flat surfaces. I have tried to show in another place⁸ that, notwithstanding the common opinion championed by M. Perrot, these squares are simply an application of the Egyptian canon of proportions, or rather of the later canon which came into use in the Saitic period. According to a credible tradition some of the early Ionian sculptors studied this canon in Egypt and introduced a similar method of work into the Aegean. One cannot say, however, whether it was in Naukratis itself that they saw the system employed by Egyptian workmen, for the plaster models found there are perhaps all later than their time.

3.—*Terracottas and Moulds.*

The last excavation produced nothing so good as the group of female busts which were found in 1899 in the neighbourhood of the shrine of Aphrodite in the Hellenion. Of the ordinary archaic Greek types we obtained almost nothing except a fragment of a female figure holding a dove against her bosom in her left hand. Some interesting though far from beautiful fragments were found in one of the trenches near the north side of the 'Great Temenos.' On the evidence of stratification—especially of some Greek pottery which was found close by—they may be dated to the sixth century B.C. Three of these fragments (from three different figures) are reproduced below (Fig. 11). They belong to rather large statuettes of coarse fabric, made solid, with flat backs. The largest piece is part of a naked female figure. The head is remarkable for the way in which the lips are stuck on, while another head from the same find has the hair represented by small impressed circles. The latter peculiarity I have noticed on several terracottas from Memphis and Boubastis which are likewise made solid, but whether these have any direct connexion with the present group I cannot as yet say for certain. Some of them are distinctly Egyptian, and it need not be supposed that the Naukratis fragments are Greek work.

From the Hellenion area came some fragments of a fairly large figure of good Greek style representing the infant Herakles strangling the serpents.

⁷ *Naukratis*, i. Pl. 17, No. 2. An 'archaic head of hard limestone' reproduced in *Naukr.* ii. Pl. 17, No. 13, looks like another of these models.

⁸ *Recueil de Travaux*, forthcoming number.

We obtained the usual number of Hellenistic female heads like those of the Tanagra statuettes. Many of these were certainly made in Egypt, as could be seen from the clay, and no doubt there was a manufactory of them in Naukratis itself. The Satyr on the wine-skin in the Cairo Museum—one of the very finest of Hellenistic terracottas—is said by M. Maspero to have been found near Kum Gayif⁹ and is very probably therefore a Naukratite work. As regards the later types, the ordinary statuettes of the Roman period, it is sufficient to say that they are as plentiful in Naukratis as in other Egyptian towns. The only one I need mention is a fragment of an irrigation scene representing a man working the Archimedean screw.¹⁰



FIG. 11.

That terracottas were made at Naukratis is proved beyond doubt by the moulds which Mr. Hogarth found there. They came from the top rubbish at the N.E. end of the site. One of the best of them, now in Cairo, is reproduced in Fig. 12. Like all the others it is made of ordinary Egyptian terracotta. The outside is roughly smoothed down. The right side of the mould is broken. As can be seen from the photograph, the subject is a female figure of Hellenistic style (like some of those from Tanagra) with a mantle draped across the front of her body. Head and hands have been made separately: the face at least would probably be done in a mould. The back was, no doubt, more or less plain, perhaps a mere rough wall made by hand. The edges of the mould are quite sharp: it is evidently not part of a piece-mould.

⁹ *Guide to the Cairo Museum*, 1903, p. 354.

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¹⁰ For a complete example of this type see p. 44.

In material and technique Fig. 12 belongs to the ordinary type of mould used in Greek countries for the fabrication of terracottas. There are many similar specimens from Greece, Asia Minor, and Sicily, and a few others from Egypt. Where this type of mould was used, if a figure had to be made in several sections, each section was pressed in a single separate mould, and the parts were afterwards joined together by hand. But most of the moulds for terracottas found in Egypt are of a different type from this.¹¹ They are piece-moulds, usually of two parts, and the edges of the sections are fitted together by mortises and tenons: probably the two parts of the terracotta were first attached to each other by the two sections of the mould being pressed together, the junction being afterwards completed by hand. Another peculiarity is that they are for the most part made of plaster instead of terracotta. The ordinary Graeco-Egyptian terracottas of the Roman period were made in moulds of this form, whether of clay or of plaster. At



FIG. 12.



FIG. 13.

¹¹ *Catalogue Général du Mus. du Caire: Greek Moulds*, p. xiii; *Verzeichniss der Aeg. Altertümer* (Berlin), p. 373.

what date the type was introduced we cannot say, but it seems probable that the ordinary Greek type, such as we find at Naukratis, was still in common use in the Hellenistic period.¹²

The best of the other moulds found by Mr. Hogarth was a large negro's face, now in the Ashmolean Museum: Fig. 13 represents a cast from it. It had broader edges than Fig. 12, but was not part of a piece-mould proper. Another complete specimen, left in Cairo, consisted of the front part of a bull's head with a sort of rosette above the forehead. In technique it is similar to Fig. 12.

4.—*Miscellaneous Objects.*

Very little bronze was found in the last campaign. The best piece, very good of its kind, was a small Egyptian figure of Bes playing the lyre: it is now in Cairo. The scarabs were chiefly of the local blue-glazed faience, and terracotta moulds for shaping the backs of them were still to be picked up in abundance from the rubbish heaps near the scarab factory. One of the trenches at the South end of the site produced a great quantity of small faience objects of the Saitic period, but they were much injured by the dampness of the soil and comparatively few were worth keeping. Most of them were small figurines of well-known types—sows, Thonuris, the god Shu, etc. No doubt they were made in the local factory. Among the faience objects from other parts of the site I may mention a fragment representing the forepart of a lion with open mouth; the tongue had been coloured red; the ears were of the schematic Egyptian type. Parts of little figures like *Naukr.* i. Pl. 2, Nos 10, 17 were also found. New Year bottles with necks in the form of lotus and papyrus were represented by numerous fragments.¹³ I also noticed one or two fragmentary specimens of hedgehog-vases.¹⁴ Mr. Petrie considers that the factory had passed into Greek hands before the accession of Amasis. No doubt a fabric in such a place as Naukratis would be specially subject to foreign influence, and it is very possible that some of the strangers, whether Ionian or Cypriote or Phoenician, took up the manufacture. But if so, they must for the most part have confined themselves to reproducing the Egyptian types, for after all the number of faience objects of un-Egyptian appearance found at Naukratis is very small compared with those that are entirely Egyptian. I am referring of course to the early period only. Of later genuinely Greek work in the same material a great many fragments have been discovered on the site, as for instance pieces of vases with female figures in relief: it is very probable that there was a fabric there in the Ptolemaic period. The finest Greek work in blue glaze that I know of is a

¹² Pernice, *Jahreshefte*, 1904, p. 154, gives some interesting information and suggestions about the sort of moulds used in making Greek bronzes. It is very possible that the methods of the *coroplastae* were in various centres influenced by those of the bronze-casters or the

other way about. I hope to return to the questions about the bronzes some other time.

¹³ Cf. Bissing, *Fayencegefässe* (Cairo Catalogue), p. xv.

¹⁴ Cf. *op. cit.* p. xxv.

head from Naukratis in the British Museum, the portrait of a Ptolemaic queen (*Naukr.* ii. Pl. 17, No. 11).

The small object figured below (Fig. 14) seems to be a comb of limestone with a handle in the form of a human head. It came from the *schalkin* and was presumably found on the site. It has an odd resemblance to certain combs and pin-heads of bone, ivory, and stone from the prehistoric finds in upper Egypt (cf. *Nagada and Ballas*, Pl. LIX).



FIG. 14.

5.—Conclusions.

The antiquities of which I have given the above desultory description do not by themselves throw any new light on the early history of Naukratis.

The finds at the South end of the site consisted for the most part of Egyptian material, such as faience objects and native pottery (see Mr. Hogarth's remarks above, p. 107). Several fragments of imported amphorae like Fig. 4 were found, but of painted Greek pottery there was scarcely anything. This confirms our previous belief that in early times the South end was the more Egyptian part of the town. It is also a minor argument against the view that the 'Great Temenos' is to be identified with the Hellenion.

The area at the North end, where we have placed the Hellenion, chiefly on the ground of so many inscriptions to the 'Gods of the Hellenes' having been found there, has now been tested to the bottom level wherever it was practicable. The antiquities from this area are almost all Greek, including a great deal of sixth century pottery.

Professor Petrie's work at Naukratis proved beyond doubt that the site was inhabited long before the time of Amasis. But even in the seventh century the town was not a purely Greek settlement. It was at least partly Egyptian. Native artisans worked and lived there. That the Cypriotes had a footing in the place from a very early period is almost certain. The engraved tridacna shells, which are found scattered along the routes of Phoenician trade and of which so many specimens come from Naukratis, indicate that the Phoenicians too had a direct or indirect connexion with the town: it may have been at one period a port of call for Phoenician ships.

Unless the testimony of Herodotus is entirely baseless (which probably no one will maintain), the town suffered a great reorganization and extension under Amasis. According to Herodotus it was that king who gave the Greek traders sites for building altars and *temene*, of which the largest was the Hellenion. The main questions still in dispute (from the archaeological point of view) are whether any of the temples were founded before the time of Amasis and whether the antiquities from them, particularly the inscribed and painted pottery, are in part earlier than 570 B.C. Endt, *Ionische Vasenmalerei*, p. 68, adopting the conclusions of Hirschfeld without question-

ing, accepts this late date for the Naukratite pottery.¹⁵ When writing of the finds from the 1899 excavation I expressed a somewhat similar opinion (*B.S.A.* vol. v). The excavations of Boehlau in Samos have shown that some early Ionian types were still popular in the second half of the sixth century. Still, if the dates which are generally accepted by archaeologists about early Greek pottery are right, it seems very doubtful whether all the fragments from the Naukratis temples can be as late as 570. As the literary evidence is not in itself decisive, there is at least a probability that some of the temples, especially that of the Milesian Apollo, date from the earlier days of the town. But most likely the Hellenion was a later foundation: its situation is less central and the finds from it are less archaic. One may reasonably suppose that this, the largest and most famous of the Greek *temene*, was built when the town was resettled by Amasis and that from this period dates the importance of the nine combined states,—of one of which, it must be remembered, Herodotus was a citizen.

C. C. E.

Cairo, 1904.

¹⁵ The same paragraph contains some curious information about the founding of Daphnae (p. 69).

THE GREEK WARSHIP.

I.

THE controversy as to the arrangement of the oars in ancient warships has been, in one aspect and with the due exceptions, a controversy between the scholars and the sailors, in which, while the sailors cannot well be wrong on their own ground, the same impossibility hardly applies to their opponents. When the practical seaman points out that superposed banks of oars, in the accepted¹ sense, are a frank impossibility, it is hardly a conclusive reply to tell him that his acquaintance with the authorities leaves something to be desired. It follows, that for anyone who, like the present writer, is convinced that the sailors are right, the real interest of the question is this: does the evidence compel me, or even invite me, to believe in a practical impossibility?

¹ By 'the accepted theory' in this paper I mean the group of solutions (they are legion) which, though differing in details of arrangement, agree in this, that a trireme had three banks of oars at a *substantial* interval one over the other, a quinquereme five, a dekeres ten, and so forth, each oar rowed by one man and the lowest bank fairly near the water. (I do not include Bauer, or so much of Assmann as relates to *breit-polyereis*.) All these solutions rest on a common basis and fall together if that be destroyed. The most important current expression of this theory, beside Mr. Torr's, is Assmann's *hoch-polyeres* theory (art. *Seewesen* in Baumeister and several papers, notably *Jahrb.* 1889, p. 91, *Zur Kenntniss der Antiken Schiffe*), followed by Droysen, *Griechische Kriegeralttümer* in Hermann's Lehrbuch; Luebeck, *Das Seewesen der Griechen und Römer*, 2 vols. 1890; and Schmidt, *Ueber griechische Dreireiher*, 1899; to judge by Luebeck's article *biremis*, it will be adopted in the new Pauly-Wissowa. Bauer's theory (*Griechische Kriegeralttümer* in Müller's *Handb. d. klass. Alt.-Wiss.*, 1893, and several papers), that a trireme had a *very slight* interval between the banks and that ships larger than triremes never had more than three banks but employed more than one man to an

oar, is quite a separate matter. Important is Admiral Fincati's *Le Triremi*, 1881; a trireme had three oars to one bench, like a Venetian galley a *zenzile*. I unfortunately only know this book in Serre's translation, at the end of Vol. 1 of his *Marines de la guerre*, 1885 and 1891, from which I cite it. I cannot classify Admiral Serre; though accepted, I believe, in France, his views seem to bear little relation to the evidence. Weber's book *Die Lösung des Trierenrätsels*, published 1896, but written much earlier, with many blunders and mistranslations, contains ideas. A trireme had three men to an oar, a quinquereme five, etc. Accepted by Speck, *Handelsgeschichte*, 1900. Weber has no monopoly in mistranslations. The best exposition of the accepted theory prior to Assmann is probably that of Cartault, *La Trière Athénienne*, 1881. I understand he afterwards agreed with Bauer. While this paper was in the press two important articles appeared: one by Mr. Torr in *Dar.-Sagl. s.v. navis*, which seems to state his version of the accepted theory more definitely than was done in *Ancient Ships*; the other by Mr. A. B. Cook in Whibley's *Companion to Greek Studies*, who favours the Venetian theory, but not very decidedly. References to Torr in this paper are to *Ancient Ships* unless otherwise stated.

If it does, the fact obviously has a very real bearing on the question of the degree of credibility to be attached to ancient history generally; and this

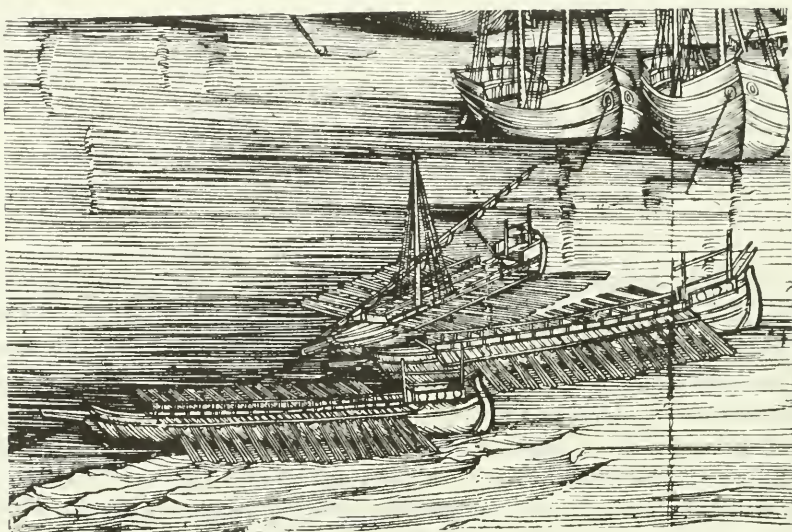


FIG. 1.—GROUP OF VENETIAN TRIREMES A ZENZILE.

From a wood-cut in the British Museum, dated 1500, by Jacopo de' Barbari. (Large view of Venice, Mitchell Collection, 1895. 1. 22. 1195.)

seems to me to be the true importance of what has become known as the 'trireme-problem.' The object of this paper is simply to examine evidence.



FIG. 2.—SMALL PORTION OF A VENETIAN BIREME A ZENZILE, SHOWING THE ARRANGEMENT OF THE ROWERS.

From a wood-cut in the British Museum, late fifteenth century (1866. 7. 14. 48*). This appears to be a state galley, and is at rest, with the crew sitting in her.

and to try to ascertain primarily what quinqueremes and triremes were *not*, with a view to clearing the ground: the period to be considered ends in

effect with Actium,² which closes an epoch in naval warfare. The positive conclusion appears to be that the Greek system was analogous to the Venetian, *i.e.* that a trireme was in the nature of a zenzile, and that the large ships of the last three centuries B.C. were galleys a scaloccio.³

Apart from the Athenian lists, which are conclusive for what they state, the evidence falls mainly into three classes; (1) historians and inscriptions, (2) scholiasts and lexicographers, (3) monuments. Class (1) varies in weight but includes all the best evidence. Class (2) has no independent value at all; at best it can only be used to illustrate Class (1). Where they disagree Class (1) must prevail. Probably Mr. Torr is right in saying that Class (2) can be neglected altogether. In Class (3) every item must be taken on its own merits; one may be of great value, another worthless. This class requires a more thorough going criticism than it has ever received or than I am competent to give.⁴ Many supporters of the accepted theory are inconsistent; they may begin, like Assmann, by saying that Class (2) is not trustworthy; they always end by relying upon it. This paper is intended to be based primarily on Class (1). For obvious reasons I have had to consider Class (2) to a certain extent; I have never relied on it myself and I do not consider it evidence.

The following propositions seem to represent the facts of the case.⁵

A.—The terms *thranite*, *zugite*, *thalamite*, have nothing to do with the horizontal rows (or banks) of oars. The rowers were in three divisions, or squads, *thranites* astern, *zugites* amidships, *thalamites* in the bows. This applies to triremes and the larger *polyereis*.⁶

B.—The terms *τρίκροτος δίκροτος* and *μονόκροτος* refer primarily to these squads.

C.—There is no evidence of any kind, good or bad, for the dogma that, among Greeks and Romans, at all times and in all places, one man rowed one oar; but there is good evidence (1) that in the triremes of the Peloponnesian war one man rowed one oar and (2) that the same applies to the Athenian quadriremes and quinqueremes of the fourth century.

D.—There is some evidence (1) that in the first century B.C. more than one man sometimes rowed one oar and (2) that the larger *polyereis* were too

² I have had to notice the boats on Trajan's column, and one or two other matters, and, of course, writers of later date.

³ A trireme a zenzile was one in which three men sat on one bench on the same level, one a little astern of the other, each rowing one oar, the three oars issuing through one opening side by side, and giving the appearance of a bundle of three oars (see Figs. 1 and 2). In the galley a scaloccio several men rowed each oar.

⁴ The monumental evidence is often overrated. Even in the case of the best monuments,

one can never say how far the artist may have sacrificed truth of detail to artistic considerations. It will be considered under *E*.

⁵ However little one wishes to dogmatise, one cannot always be writing in the potential mood and expressing every shade of proper reservation.

⁶ By 'the larger *polyereis*' in this paper I generally mean quadriremes to dekereis both inclusive, nothing over a dekereis being heard of in action.

low in the water, too light, and of too simple an arrangement, to admit of the accepted theory being applicable to them.

E.—There is no good evidence, and very little bad, that can be made to refer to the accepted theory. There is none that necessitates, or even invites, this theory.

It remains to consider the evidence for these propositions,⁷ and the conclusions to be drawn from them; and, finally, to consider the Athenian trireme.

A.

Polyaen. 5, 43. 'Calliades, overtaken by a swifter ship, kept using his steerage frequently, according as (the pursuer) tried to ram now from one side and now from the other, so that the pursuer, striking his steerage with her catheads, might not be able to ram by reason of her ram being over against his first (*i.e.*, sternmost) thranite oars.'⁸ That is to say, as the boat behind made her shot, Calliades put on his steerage; the ram missed his stern and slid past it toward, pointing at, his sternmost oars, while the cat-head struck his stern, and of course too high to do much harm; this checked the pursuer's way for the moment, and while she was straightening herself for another shot Calliades would gain a little on his new tack. The oars the ram pointed at were the first or endmost *thranite* oars. On the accepted theory they would have been the first or endmost oars of all three classes. The thranite oars therefore were in a group at the stern.

Polyaen. 3, 11, 14. Chabrias prepared a second set of steering oars for rough weather which he put out through the *παρεξαιρεσία* beside the thranite oars (*κατὰ τὰς θρανίτιδας κώπας*). His avowed object was to prevent the steering oars leaving the water as the ship's stern lifted, and of course the oars that they were put out beside can only have been the sternmost oars. The thranite oars then are the sternmost oars. On Assmann's theory no sense can be given to the words 'the thranite oars' at all;⁹ for as he supposes that the thranite oars were rowed through the

⁷ *A* is very old as an *opinion*. *B* and a good deal of *D* (2) are new, I think. *C* (1) is given correctly by Bauer. *D* (1) is primarily Weber. In referring in this paper to Bauer's arrangement I mean his arrangement considered physically, *i.e.*, as a slight interval only between the rows, apart from questions like the meaning of thranite or *παρεξαιρεσία*.

⁸ τῷ τὴν ἐμβολὴν εἶναι κατὰ τὰς πρώτας θρανίτιδας κώπας. The only writer known to me who cites this passage is Breusing, *Die Lösung des Trierenrätsels*, 1889; and as he could not understand it at all, he said that the words from τῷ τὴν ἐμβολὴν to the end must be a gloss. If one may discard everything as a gloss that does not suit one's own theory, one

can prove anything. No one who has seen a bumping race, and watched the cox of the boat in front washing off the nose of the boat behind with his steerage, will have any difficulty in construing the passage. I quote Polyaenus throughout from Woelfflin-Melber. He made considerable use of Ephorus; but according to Melber, *Ueber den Quellen und der Wert der Strategemensammlung Polyäns*, (1885), the passages most material to this paper (5, 43; 3, 11, 7 and 12 and 13; 5, 22, 2) are derived from some earlier work on naval tactics.

⁹ Assmann has to translate it (Baumeister, 1616) 'neben den hintersten Thranitenriemen,' which is not in the Greek.

παρεξαιρεσία and the others through portholes below, if the steering oars were put through the *παρεξαιρεσία* they could not be beside any oars *but* thranite oars, and the words are redundant and meaningless. The necessary sense is 'beside the sternmost oars,'¹⁰

Polyb. 16, 3 (battle of Chios). Philip's dekeres rams a trihemiolia¹¹ in the middle of the hull under the thranite 'thole.'¹² On the accepted theory this can only mean 'between the thranite and zugite banks.' The difficulty is twofold: (1) historians never (I think) mention the *height* at which a ship is struck: their references are always longitudinal, so to speak. They distinguish between blows *ὑφάλα* and *ἐξάλα*; otherwise they appear to assume, as all monuments (and all reason) shows, that the ram, if not submerged, was near the waterline; (2) even if the trihemiolia were lower than a trireme, the dekeres, if I am right as to its height, (see under *D*), cannot have had its ram placed as high as the 'zugite' bank; while if the accepted theory be true, then, even if the trihemiolia were as high as a trireme, the far taller dekeres must have cut her right down with the stem and could not be said to ram her 'under' anything.—The passage is of course not conclusive.¹³

¹⁰ This passage, unlike the former, is not evidence against anyone but those who accept Assmann's view (based on the monuments) of the *παρεξαιρεσία* as an outrigger or 'oar-box' (Riemen-kasten); however, as it is conclusive that Assmann is right on this point, this is not very material. Chabrias' new steering oars were not where the old ones were. The new ones were through the *παρεξαιρεσία*; therefore, the old ones were not. But the old ones were in the usual place on the stern of the ship, as shewn by their lifting clear of the water; therefore the old view, that by *παρεξαιρεσία* is meant the stern (and bow) of the ship *beyond* the oarage, is untenable. The same conclusion is supported by *Peripl. Pont. Eux.* 3, the waves coming in not only through the oar-holes but over the *παρεξαιρεσίαι* (where the reference *must* be to a *higher* point, not a *different* point); and by the frequent references to ships losing part of their *παρεξαιρεσία* in action (Thuc. 7, 34 is a good instance). But the absolutely decisive passage is Polyæn. 3, 11, 13; Chabrias stretches skins over the *παρεξαιρεσία* of *each side* of the ship (*ὑπὲρ τὴν παρεξαιρεσίαν ἐκατέρου τοίχου*) and nails them to the deck above, thus making a *φράγμα* which prevented the waves washing in and the oarsmen looking out. Chabrias here improvised a cataphract. Assmann never really proved his own theory of the *παρεξαιρεσία*; at the same time there is nothing in Buresch's attack on it, *Die Ergebnisse der neueren Forschung über die alten Trieren* (Woch. für klass. Phil. 1891, No. 1).

¹¹ In a Rhodian inscription of the first

half of the first century B.C. (*I.G.* xii. fasc. i. No. 43) trihemioliai are contrasted with cataphracts, and again triremes with aphracts; suggesting that the trihemiolia was then a smaller or less important ship than a trireme. The form *τριηρημιολία* (Ath. 203 d) suggests that Photius is right in calling it a trireme; if so, it was a light trireme evolved from a hemiolia (as to which see n. 22), as the trireme from the pentekontor. The suggestion that it means a ship of 2½ banks is the merest guess-work.

¹² *κατὰ μέσον τὸ κύτος ὑπὸ τὸν θρανίτην σκαλμόν.* Cited by Weber.

¹³ As I shall often have to refer to the battle of Chios, I should note that some writers (e.g. Beloch, *Bevölkerung*, and Ihne) doubt the accuracy of Polybius' version, obviously drawn from Rhodian sources, that it was a defeat for Philip. But even if so, this cannot affect the details of single events, which are precisely given; for even if the Rhodians wrote up an account of the battle for the honour of Rhodes and Theophiliscus, they would take all the more care to put in details that either did happen or might, consistently with nautical probability, have happened. The account of this battle is hardly affected by Polybius' supposed inaccuracies as to the first Punic war, for which his sources were far different. One cannot go into the case for Polybius in a note; but I would point out (1) that, as to the numbers, no one, I think, has yet examined the numbers in the sea-fights generally up to Actium, and the only examina-

Is there any counter-evidence, *i.e.*, evidence for the view that thranite refers to the men in the highest row or bank of a trireme, zugite to those in the middle row or bank, thalamite to those in the lowest, however the rows were arranged? All that I have ever seen cited belongs (except Pollux) to Class (2) and is given below¹⁴; I know of no other.¹⁵ I have collected these passages so that it may be seen at a glance that all of them (except the first half of Schol. *Frogs* 1074 and one from Eustathius and that from Pollux) represent *one* statement only, namely, that given in the latter half of Schol. *Frogs* 1074.

If the latter half of this Scholion on *Frogs* 1074 is all one sentence, what it says is 'The τάξις which is κάτω is the thalamites, that which is μέση is the zugites, that which is ἄνω is the thranites. Therefore, the thranite is astern, the zugite in the middle, the thalamite toward the prow.' Everyone (except Weber) has omitted the οὖν. Now if οὖν means 'therefore,' it follows of course that by ἄνω the Scholiast means 'astern' and not 'above'—the *consequence* of sitting ἄνω is that you sit astern—and by κάτω he means 'in the bows' and not 'below.'¹⁶ Any supporter of the accepted

tion for part of the period that I know of—Kriemayer, *Die Entwicklung der röm. Flotte vom Seeräuberkrige des Pompeius bis zum Schlacht von Actium* (Philol. 1897), p. 426—accepts the great numbers recorded for the war with Sextus Pompey; (2) that to bring in the population question (Beloch, *Serre*) is surely to explain *obscurum per obscurius*; (3) that the real exaggeration is not in the separate accounts of battles, which generally mention 'ships' or 'cataphracts,' but in the summing-up chapter (1, 63), where Polybius has used πεντήρεις when he ought to have said warships, as appears both from the separate accounts and from the *columna rostrata* (*C.I.L.* 1, 195); and (4) that Ihne's objection (*Röm. Gesch.* 2, 47) that the Romans had ships before the first Punic war, neglects the obvious explanation that Polybius or his authority means no more in speaking of the creation of the Roman fleet than we might in speaking of the creation of the German fleet—a first serious bid for sea-power. See also n. 91.

¹⁴ Schol. *Frogs* 1074 τῷ θαλάμακι τῷ κωπηλατοῦντι ἐν τῷ κάτω μέρει τῆς τριηροῦς. τῷ θαλάμακι οἱ θαλάμακες ὀλίγον ἐλάμβανον μισθὸν διὰ τὸ κολοβαῖς χρῆσθαι κώπαις παρὰ τὰς ἄλλας [Γ] τάξεις τῶν ἐρετῶν ὅτι μᾶλλον ἦσαν ἐγγὺς τοῦ ὕδατος. || ἦσαν δὲ τρεῖς τάξεις τῶν ἐρετῶν καὶ ἡ μὲν κάτω θαλαμῖται, ἡ δὲ μέση ζυγῖται, ἡ δὲ ἄνω θρανῖται. θρανίτης οὖν ὁ πρὸς τὴν πρύμναν, ζυγίτης ὁ μέσος, θαλάμιος ὁ πρὸς τὴν πῶρναν. (I cite down to || from Rutherford's ed. of the scholia (1896); he does not give the latter half, which is therefore not in the *codex Ravennas*.

I cite it from the *codex Venetus*. In the former half, according to the facsimile published by the Hellenic Society, *cod. Ven.* omits Γ.) Schol. *Ach.* 162 τῶν ἐρεττόντων οἱ μὲν ἄνω ἐρέττοντες θρανῖται λέγονται, οἱ δὲ μέσοι ζυγῖται, οἱ δὲ κάτω θαλάμιοι. Hesyeh. θρανίτης ὁ πρὸς τὴν πρύμναν, ζυγίτης ὁ μέσος, θαλάμιος ὁ πρὸς τὴν πῶρναν (so Suidas and Zonaras). Hesyeh. θαλάμιος ἐρέτης· ὁ κατωτάτω ἐρέσσων ἐν τῇ νηὶ θαλάμιος λέγεται, ὁ δὲ μέσος ζύγιος, ὁ δὲ ἀνώτατος θρανίτης. θαλάμιοι κώπαι· οἱ κατωτάτω καὶ οἱ ταύτην ἔχοντες τὴν χώραν θαλάμιοι λέγονται. Suidas. θρανίτης λεώς· τῶν γὰρ ἐρεττόντων οἱ μὲν ἄνω θρανῖται λέγονται, οἱ δὲ μέσοι ζυγῖται, οἱ δὲ κάτω θαλάμιοι. Etym. Mag. θαλαμῖδιοι κώπαι· ὁ κατωτάτος ἐρέτης θαλάμιος λέγεται, ὁ δὲ μέσος ζύγιος, ὁ δὲ ἀνώτατος θρανίτης. Eustath. 1818, 52 ἔχει δὲ, φησὶν (Pausanias), οὗτος (thranite) τὴν ἄνω ἔδραν, τὴν δευτέραν ζύγιος, τὴν τρίτην θαλάμιος. 640, 11 θαλαμῖται καὶ θαλάμακες ἐρέται οἱ ὑπὸ τοὺς θρανίτας. Lastly Pollux 1, 87 καλοῖτο δ' ἂν καὶ θάλαμος οὗ οἱ θαλάμιοι ἐρέττονσι· τὰ δὲ μέσα τῆς νεὸς ζύγα, οὗ οἱ ζύγιοι καθῆνται· τὰ δὲ περὶ τὸ κατὰ στρωμα θράνος, οὗ οἱ θρανῖται.—There is another scholion on *Frogs* 1074, given by Zuretti, *Scolii ad Plauto ed alle Rane d' Aristofane dal codice Veneto 472 e dal codice Cremonense 12229*, I, 6, 28: τρεῖς τάξεις ἦσαν ἐν τῇ τριήρει· οἱ μὲν πρῶτοι θρανῖται καλοῦμενοι, οἱ δὲ δεύτεροι ζυγῖται, οἱ δὲ τρίτοι θαλάμακες. Read with Eustath. 1818, 52, this illustrates the use of πρῶτος as sternmost in Polyæn. 5, 43 above.

¹⁵ Unless it be Ar. *Mech.* 4, discussed under *E'*.

¹⁶ That ἄνω and κάτω mean 'astern' and

theory must say then either that *οδν* here means, not 'therefore,' but something indeterminate, such as 'well, then;' or else that the sentence is two separate scholia, combined in an unintelligent manner. Either is possible, though neither can be shewn to be correct; but in any case it is certain that this scholion and the similar passages depend on the meaning of *ἄνω* and *κάτω*.

Pollux 1, 87 is different, and suits my view at least as well as the accepted theory, even if Pollux be referring only to triremes, which we have no right to assume.

Remains Eustath. 640, 11. If this is not (as I think it is) Eustathius' own misunderstanding of *κάτω*, then the question arising is, are we to follow on the one hand Eustathius, or on the other Polyaeus (twice) and (in effect) Arrian (see *B*)? The answer admits of no possible doubt.

What it then comes to is this. In order to say that the terms *thranite*, *zugite*, and *thalamite* refer to longitudinal rows or banks one over the other, we must take the latter portion of the Scholion on *Frogs* 1074, say it is evidence, translate it in a way that, at best, cannot be shown to be correct, and use the result, with the (possible) help of Eustathius, to overrule two passages in Polyaeus, possibly one in Polybius and (in effect) Arrian (see *B*); and having done this, we land after all in the difficulty in which everyone is landed by the fact that all the higher values, as shewn by that inconvenient *tesserakonteres*, only possessed the same three classes of oarsmen.¹⁷ I may add that my view explains that thorn in the side of the accepted theory, the greater number of the *thranite* oars as compared with the *zugite* and *thalamite* oars, which the Athenian lists render certain.

B.

The terms that correspond to the division of the rowers on a warship into squads are *τρίκροτος*, *δίκροτος*, and *μονόκροτος*, which are usually referred to the (triple) beat of the three banks of a trireme, the (double) beat of the

'in the bows' has often been asserted but never proved. I believe it is correct, but my reason for thinking so is given in *B*; it has nothing to do with the Schol on *Frogs* 1074. If it be correct, all the *ἄνω* and *κάτω* passages given in the note are disposed of conclusively.

¹⁷ This forced Assmann to explain e.g. a *dekeres* as constituted by three superposed triads, each triad consisting (in superposition) of a *thranite*, *zugite*, and *thalamite*; with a lonely *thalamite* on the top. The *τεσσερακοντήρης* is legitimate evidence so far as it goes. Since the inscription about the *τριακοντήρης* was found, no one can suppose it to be a bad joke of Callixenus'; and the idea that it was a kind of flat-bottomed river barge (Assmann, Droysen, Torr) seems to me to be disposed of by the fact

that Philopator had such a barge (the *θαλαμηγός* of Ath. 204 d. seq.). If any one will read Athenaeus consecutively he will see that he puts side by side three monsters of three different types; the *τεσσερακοντήρης* (long ship), the *θαλαμηγός* (*ποτάμιον πλοῖον*), and Hiero's ship (round ship). The height of the *tesserakonteres*, on which rests the 'Mississippi steamer' theory, is given to the top of the *ἄκροστόλιον*, which (pace Liddell and Scott) is not the gunwale, see Torr, 68. Those who treat *δίπρωπος* as *ἀμφίπρωπος* have forgotten the old Calais-Douvres; and the twin hull was only the logical outcome of the common practice of lashing two ships together to get a steady platform.

two banks of a bireme, and the (single) beat of the one bank of a *μονήρης*. There is no evidence for this whatever, and if it were true one ought to find *τετρακίκροτος* and so forth, forms that never occur. The conventional explanation of their non-occurrence, given by Graser and repeated by Cartault and Luebeck, *viz.*, that the larger polyereis did not appear to an *observer from the side* to have more than a *triple* beat, is futile; why did any ship, *from the side*, appear to have more than a single beat? ¹⁸ The words must apply to some arrangement which was threefold and no more; and it can hardly be a coincidence that precisely the same point arises over the words *thranite*, *zugite*, and *thalamite*.

The important passage is Arr. *Anab.* 6, 5, 2,¹⁹ generally cited, together with a note that *δίκροτος* = *διήρης*, to shew how near to the water was the lower bank of a bireme. The explanation is unfortunate, as Alexander had no biremes with him. Indeed they were not in use in his time. No one seems to have considered this preliminary point.

To take things in order. Arr. *Anab.* 5, 8, Alexander carries his ships over from the Indus to the Hydaspes, triakontors in three sections, the smaller boats in two. 6, 1. He builds on the Hydaspes many triakontors and hemioliai, also horse-transporters and other transports. 6, 2. The fleet that started down the Hydaspes, according to Ptolemy, consisted of eighty triakontors, together with horse-transporters, *cercuri*, and river boats, some being native boats, and some newly built. 6, 5, 2. (At the junction of the Hydaspes and the Acesines) the cargo boats (*στρογγύλα*) came through the rapids safely; but the warships (*μακραί*) suffered, as they were lower in the water, and those of them that were *δίκροτοι* had their *κάτω* oars not much above the water; and two were lost. 6, 14. He builds more ships in the land of the Malli. 6, 15, 1. He receives some more triakontors and some cargo boats (*στρογγύλα*). 6, 15, 4. He refits. 6, 18, 3. On his expedition from Patala to the sea he takes the swiftest of the hemioliai, all the triakontors, and some *cercuri*. 6, 18, 4. The waves get up and he loses some triakontors. Arr. *Ind.* 19. On the Hydaspes, Alexander had about 800 vessels, both warships (*μακραί*) and cargo boats (*στρογγύλα*) and horse-transporters and food-transporters. 23. Nearchus loses two warships (*μακραί*) and a *cercurus*, in a storm. 31. Nearchus (requiring a good ship for special service) sends a triakontor—the island story. No other writer adds anything.²⁰

Two things come out strongly from this: (1) the important warships were the triakontors; (2) the *only* warships were the triakontors and hemioliai, for Arrian does not count a *cercurus* ²¹ as *μακρά* (*Ind.* 23). The warships.

¹⁸ If there was a visible triple beat on any view, what becomes of the stock comparison with the wings of a bird?

¹⁹ ὅσαι τε δίκροτοι αὐτῶν (*i.e.* τῶν μακρῶν νεῶν) τὰς κάτω κώπας οὐκ ἐπὶ πολὺ ἔξω ἔχουσιν τοῦ ὕδατος.

²⁰ Curtius, Diodorus, and Justin are silent. Plutarch (*Alex.* 63) says he built *πορθμεία*

κωπήρη καὶ σχεδίας.

²¹ For *cercurus* see Torr *s.v.*; a type equally suited for warfare or commerce, but always reckoned among the small craft of a fleet; he has a lot of evidence. Weber's idea that a *cercurus* was a trireme is a mere mistranslation of App. *Pun.* 121.

then that were δίκροτοι were either triakontors or hemioliai. But whatever δίκροτος means, it is certain that a hemiolia was not δίκροτος.²² The ships that were δίκροτοι then were triakontors, *i.e.*, μονήρεις of fifteen oars aside. Consequently, δίκροτος does not primarily mean a bireme, whatever the lexicographers say, and does not therefore refer to the double beat of a bireme's two banks of oars, supposing it to have had such.

If then δίκροτος does not mean 'double-beating,'²³ it can only mean 'double-beaten.' Now συγκεκροτημένοι is the common term for a trained crew, 'beaten together,' or 'welded together'—(we sometimes say *ground* together); δίκροτος therefore means 'double-welded,' a ship whose crew is trained in, or falls into, two squads.²⁴

Now we can get at the meaning of ἄνω and κάτω. A triakontor had two squads of rowers, and, though single-banked, the oars were distinguished as those κάτω from those something else, presumably ἄνω. In relation to the oarage, therefore, κάτω and ἄνω mean fore and aft;²⁵ and this is confirmed by the usage of κατά and ἀνά.²⁶ This explains the Schol. on *Frogs* 1074, in

²² App. *Mith.* 92 the pirates originally (πρωτων) used myoparones and hemioliai, later (εἵτα) δίκροτοις and triremes, *i.e.*, when they organised themselves. This is conclusive; and overrules Hesych. ἡμιολία· ἡ δίκροτος ναῦς, where the definite article makes nonsense anyhow. I want to make this clear, because the accepted explanation of ἡμιολία is a ship with 1½ banks. There is not a shred of evidence for this; it rests on the fact that ἡμιόλιος means 1½. I might say that hemiolia means a ship of 1½ squads, which has at least the support of Photius *s.v.* ὃ τὸ ἡμιόλιον μέρος ψιλὸν ἐρετῶν ἐστὶ πρὸς τὸ ἀπ' αὐτοῦ μάχεσθαι. The certain thing is that it was a pirate ship (Arr. *Anab.* 3, 2, 4, App. *Mith.* 92, Phot. *s.v.*), and a typical one (Theophr. *Char.* 25, 1), and could be classed with the little myoparones, which were certainly single banked (evidence Torr 119); it was a favourite for surprises (Diod. 19, 65, Polyæn. 4, 7, 4); and the latter passage also shews it was small, the object of Demetrius being to display the minimum of force. Pirates, whose heads depended on their speed, would not go in for fancy arrangements of oars.

²³ The word occurs in the active sense once, in a chorus (Eur. *I.T.* 407), δίκροτοισι κόπαις, of the Argo, (a traditional single-banked ship, Ap. Rhod. 1, 394 *seq.*), where it refers to the beat of the oars on either side of the ship. This shews that in Euripides' time it cannot have been a technical term for the beat of two banks on the same side of the ship.

²⁴ The same causes which compelled the Venetians to divide the crew of a trireme into

3 squads and work as a rule in relays (Fincati p. 167) would have compelled the Greeks also to do this. Part of a crew did row alone, (Thuc. 3, 49; Polyæn. 5, 22, 4; Xen. *Hell.* 6, 2, 29); but these passages do not shew which part. If, however, when not in action, one squad only rowed at a time, as at Venice, it is explained how the Athenian horse-transports, with 60 oars only, kept up with triremes.

²⁵ *i.e.*, when used as technical terms; for Thuc. 7, 65 (the Syracusans covered with hides τὰς πρῶρας καὶ τῆς νεῶς ἄνω) might refer to the upper works of the ship. As to οὐκ ἐπὶ πολὺ ἔξω ἔχουσαι τοῦ ὕδατος, the forward oars would of course suffer most in the bad water. But it may be that these triakontors, built for a river, were even lower in the water than usual, and anyhow they would be heavily laden. Some were lost going down from Patara

²⁶ 'In the Odyssey κατά is the regular word for motion inwards, ἀνά for motion outwards;' Mr. J. L. Myres, *J.H.S.* xx. p. 140 *sq.* For later Greek, Mr. A. P. Oppé, *J.H.S.* xxiv. p. 225 *sq.* Mr. G. F. Hill kindly furnished me with these references. If the ship was generally entered from the stern, this would explain why κάτω should be fore and ἄνω aft; and at Athens anyhow she would be entered from the stern, if launched bow first; see Prof. E. A. Gardner, *Ancient Athens*, p. 553. This is also borne out by the ordinary term for 'to come forward,' ἀναφέρειν τὴν κώπην, which shows that ἀνά is motion toward the stern.

the sense required by the natural reading of the Greek,²⁷ and all the other evidence of Class (2) cited n. 14, except perhaps the one passage in Eustathius, which, as we have seen, must be treated as overruled. The conclusion reached under section A is thus strongly supported.

It is of course also possible that in some ships the forward squad sat, or once sat, rather lower on the whole than the after squad.²⁸ If this were so, the thranite oars would on the whole be rather the longest; and if the Athenian trireme resembled the Venetian triremes in Fig. 1, this may perhaps explain the statement in the Athenian lists that of some condemned thranite oars ten were serviceable for the zugites.³⁰ Once *κῆρυξ* had come to mean 'forward,' the term would remain, even if in historical times the difference was slight, or even non-existent; how many centuries have passed since 'forecastle' or 'starboard' had any real meaning?

But to return to *δίκροτος*. When Hesychius says that a *διήρης ναὺς* was also called *δίκροτος*, is he wrong? Or is the more accurate Pollux (I, 82) wrong in treating *διήρης* and *δίκροτος* as separate ships? I think both are right. I will assume here for a moment the result arrived at in section E, that (subject to the meaning of *δίκροτος*) there is no evidence for the use of biremes until well on in the first century B.C.; the question then is, is there any passage in which *δίκροτος* must mean a breme? I think there can be no doubt that it means something different from and larger than a *μονήρης*, but smaller than a trireme, in App. *Mith.* 92 (see n. 22); and it will be fairest therefore to assume that to Appian generally *δίκροτος*

²⁷ Incidentally, this may suggest that Schol. *Frogs* 1074 represents a genuine tradition, i.e., one descended from a time when men knew the technical meaning of *κῆρυξ*; for of course I do not suppose that the Scholiast *knew* this, any more than Eustathius, and all that I can attempt to shew is what the word meant to Arrian, or rather to Ptolemy.

²⁸ Bauer, *Neue Philol. Rundschau* 1895, p. 265, 'in Schräg vom Hinterschiff zum Vorschiff abfallender Linie angeordneten Ruderpfosten,' which may well be right. It is clearly shewn in the Venetian triremes in Fig. 1. See Aesch. *Igam.* 1617, and n. 80.

²⁹ The inclination of the *παρεξέρεσθια* to the long axis of the ship (n. 118) would furnish another explanation. The longest oars of the tesserakonteres were thranite oars, as the reference to the lead shows (Ath. 203 f); but as we have no idea how she was arranged, it is useless either suggesting explanations of this or drawing deductions from it as to triremes. All her thranite oars were not of the same length.

³⁰ *C.I.A.* vol. 2 part 2, 791 l. 56—*Θρανιτίδων τούτων ἀποφαίνει ὁ δοκιμαστής ζυγίας Δ*. If the number of the *θρανίτιδες* that were

ἄδδοκμοι were extant, we might have something to go on as to the relative lengths; for as *most* oars go at the leather, or point of contact, then if only a *few* could be used as *ζυγία* we should know that any theory (like Assmann's explanation of the Lenormant relief) which made the zugite oars less than two-thirds of the length of the thranite, was, on this ground alone, untenable. The higher pay of the thranites probably had nothing to do with the *length* of the oar, (that is a Scholiast's guess), but was merely one sign of the greater consideration they enjoyed; and the primary reason no doubt (apart from any question of their more probably being burgesses) was that it depended largely on them, as the stern oars, whether the boat was 'together' and kept her pace. Great importance was attached to the manning of the stern benches in a mediaeval galley, as Jurien de la Gravière shews. The Athenian lists do not really prove anything at all as to the relative length of the oars, as we do not know why those ten were condemned; and we have no right to make them mean that *all* thranite oars were longer than *all* zugite oars, still less that they were *much* longer.

means bireme, which (incidentally) takes us back to the first Mithridatic war (*Mith.* 17). How then came a word, which at the end of the fourth century was applied to a triakontor, to mean a bireme?

The first standard warship was the pentekontor, invented in 704 B.C.,³¹ from which was afterwards evolved the trireme. By the time of Demosthenes the pentekontor was no longer in regular use,³² shewing that the trireme did its work and did it better. But the lighter triakontor was in full use throughout the fourth century³³; and by the end of this century we find frequent mention of another light ship of a different type, the first³⁴ of many borrowings from pirates, the hemiolia,³⁵ from which perhaps was again evolved a sort of light or abnormal trireme, the trihemiolia.³⁶ The hemiolia and triakontor, however, run side by side as light warships, shewing that neither could do the other's work; presumably the speedier hemiolia could not ram. Philip V. introduced another light pirate ship, the Illyrian lembos,³⁷ which combined with great speed the power of ramming, and obviously effected something like a revolution in naval warfare (battle of Chios, 201 B.C.). The last mention, I think, of the triakontor in history is in the treaty between Rome and Antiochus III. 188 B.C.³⁸ The lembos then, doing the triakontor's work and doing it better, presumably tended to drive out the triakontor; and perhaps we shall not be far wrong if we guess that some one thereupon took a leaf out of Philip's book,³⁹ 'double-banked' his triakontors, and so evolved the bireme,⁴⁰ which would still be as much a *ναὺς δίκροτος* as the original triakontor had been, possessing two squads only. As the triakontor vanished, the term *δίκροτος* remained adhering (without ambiguity) to the bireme; and probably by the time that Appian

³¹ See Kroker, *Die Dipylon-vasen* (*Jahrb.* 1886), with whose account (p. 106 seq.) of the first evolution of the warship I agree, as against Pernice's criticism in *Ath. Mitth.* 17 (1892), p. 306.

³² It does not occur in the Athenian lists, and plays no part in battles again. I do not mean it was not built at all; Mithridates *c.g.* had a few, and see Polyb. 1, 20, 14 (the Italiot states), 25, 7, 1 (Egypt).

³³ Athenian lists; Arrian *l.c.* and 7, 19; Polyæn. 3, 9, 63; etc.

³⁴ If indeed the triakontor was not originally a pirate, Thuc. 4, 9.

³⁵ See n. 22.

³⁶ See n. 11.

³⁷ Demetrius had lemboi at the siege of Rhodes (Diod. 20, 85), but we do not hear of them in action (if Diodorus be correct neither he nor Ptolemy put *μονήρεις* into line at Salamis), and so cannot say if they were the Illyrian lemboi or not. Polyb. 1, 53, 9, and 3, 46, 5 (Hannibal crossing the Rhone) add nothing, and earlier mentions of lemboi refer to ship's boats. Polybius is clear as to Philip's

fleet of lemboi being almost a new thing (5, 109, *σχεδὸν πρῶτος τῶν ἐν Μακεδονίᾳ βασιλείων*) and as to his tactics at the battle of Chios being new. We may conclude that if he was not actually the first to introduce the Illyrian lembos he was the first to perceive its possibilities and to use it in a fleet action.

³⁸ Polyb. 21, 45 *μηκέτι ἐχέτω πλὴν ἰ' καταφράκτων· μηδὲ τριακοντάκωπον ἐχέτω ἐλαυνόμενον κ.τ.λ.* Livy 38, 38 has run the two together (*neve plures quam decem naves actuarias nulla quarum plus quam triginta remis agatur habeto*), while App. *Syr.* 39 mentions cataphracts only.

³⁹ See post, n. 94 as to Philip's 'lemboi biremes,' and 'double-banking.'

⁴⁰ Precisely the 'galeotta' of Furtenbach. No doubt someone experimented with biremes before triremes were invented. But these experiments remained without effect (witness the silence of Herodotus, Thucydides, and the Athenian lists, and indeed of all writers prior to Caesar) and have nothing to do with the biremes known to history, which appear first in the 1st century B.C. See under *E.*

and Arrian wrote the fact that the word had once applied to a triakontor had really been forgotten, and would have been lost, had not Arrian fortunately simply copied down Ptolemy. The above explanation is of course guesswork, but (I think) reasonable and consistent guesswork.⁴¹

As to *μονόκροτος* and *τρίκροτος*. These words, unlike *δίκροτος*, really were ambiguous, and therefore little used. Many ships were *μονόκροτοι*—not divided into squads; and apart from Xen. *Hell.* 2, 1, 18,⁴² the word is found only once.⁴³ Similarly, *τρίκροτος* would apply, not only to triremes, but to all the larger polyereis; the word occurs thrice only, in Aristides, Niketas, and Clement of Alexandria; they throw no light on its meaning.

C.

I have failed to trace either the genesis of, or any scrap of evidence that will support, the dogma that among Greeks and Romans, at all times and in all places, one man rowed one oar—a dogma that is responsible for three quarters of the nonsense written about the larger polyereis. Many writers are content to refer to the evidence as 'well-known,' generally a sign that there is not any; as given by Assmann and Luebeck, the proofs are Thuc. 2, 93; Polyæn. 3, 9, 63; Leo *Tactica* 19, 8; all the monuments.

Thuc. 2, 93⁴⁴ is conclusive evidence for this, and for this only, that in

⁴¹ It may be objected that the bireme of Octavian's time was a 'Liburnian.' Biremes are mentioned in history earlier than Liburnians, which is all I require; but it is as well to be clear about the Liburnian. In origin, it was another of the light swift pirate-craft of the Adriatic (App. *Ill.* 3), if indeed it was not the lembos under another name; and the fact that under the Empire the Liburnian was built, first as a bireme (App. *Ill.* 3, Lucan 3, 534—note Lucan's 'crevisse,' it had *gr. wv*) and later as a trireme, etc. (Veget. 4, 37), which nobody doubts, only shews that there were biremes of two different builds running parallel, the Liburnian bireme evolved from a Liburnian and the dicrotos bireme evolved from a triakontor (just as earlier there were the trireme and the trihemiolia); see *C.I.L.* 5, 1956 which mentions a 'bicrōta' called Mars and a 'Liburna' called Clupens. When Appian (*Ill.* 3) says that *in his time* light *δίκροτα* were called Liburnians he shews, either that the two builds had become confounded, or (more probably) that he was ignorant of the process by which the *δίκροτος* bireme had been evolved, and that for him *δίκροτον* was simply 'bireme.'

⁴² This passage is a good instance of one which explains equally well on *any* theory and is useless to cite. Other good instances are Polyæn. 5, 22, 4 and the drowning thalamites

of App. *b.c.* 5, 107.

⁴³ Strabo 7, 325. ἀνέθηκε Καῖσαρ τὴν δεκαναῖαν ἀκροθίνιον, ἀπὸ μονοκρότου μέχρι δεικῆρους. He uses the word to mark the fact that the trophy began, not only with a *μονήρης*, but with the smallest kind of *μονήρης*.

⁴⁴ λαβόντα τῶν ναυτῶν ἕκαστον τὴν κώπην κ.τ.λ. Bauer alone has put this correctly. As regards triremes, the passage is conclusive as against Weber (three men to an oar) who has to mistranslate it, and Serre (three banks, but in action only the top bank rowed by three men to an oar), for then Brasidas would not have troubled to take the other oars with him on a mere raid. The large number of oars for a trireme given in the Athenian lists also certainly presupposes one man to an oar. Weber has to say a trireme carried two spare sets, which (apart from the question of weight) is improbable, seeing that the account of battle after battle assumes that a ship with a crippled *παρὸς* is out of action. The spare oar question is not, however, easy; see e.g. the Hippia (*C.I.A.* vol. 2 part 2, 802 c. 6) which is said to have a *παρὸς δόκιμος* (not, however, ἐντελής δόκιμος) though five oars are broken. Probably Assman's solution is the best (reviewing Schmidt in *Berl. Phil. Woch.* 1900. No. 43); the *πρίνιες* oars were deck sweeps, carried for use in a ship left crippled. I may add that,

the triremes of the Greek states at the time of the Peloponnesian war one man rowed one oar. One is ashamed to have to state anything so elementary.

Polyaen. 3, 9, 63 refers explicitly to triakontors and to no other ships; and Leo *Tact.* 19, 8 refers explicitly to the Byzantine dromones of Leo's own time and to no other ships. Neither passage has the least bearing on the question: as Luebeck at least saw.

As to the monuments. It sounds well to say that no monument shews more than one man to an oar, provided that the hearer be not acquainted with the scantiness, the inadequacy, and the obscurity of the monumental evidence. As every monument that shews rowers is called a bireme or a trireme, this obviously has no bearing on the question of the larger polyereis, of which we are not supposed to possess any representation at all.⁴⁵

But although there is not one bit of evidence for this dogma, which should long ago have been relegated to the limbo of things forgotten, there is evidence from the Athenian lists which proves that, *at Athens in the time of Demosthenes*, the oars of a trireme could form part of the *ταῖρος* of a quadrireme and the oars of a quadrireme part of the *ταῖρος* of a quinquereme:⁴⁶ Böckh called attention to this. Now quadriremes are common enough in the later lists, and remained in use at any rate for some time, for there were 30 Athenian quadriremes in Demetrius' fleet at Salamis (306 B.C.), and as they were posted on the left wing, on which Demetrius had massed his strength, they were presumably good efficient ships. We therefore get to this, that toward the end of the fourth century an Athenian quadrireme had one man to one oar, and similar quinqueremes were being experimented with.⁴⁷ But though not in use at Athens, quinqueremes had been known and used at Syracuse since Dionysius I.;⁴⁸ and therefore perhaps we may, or ought to, say generally of the quadriremes and quinqueremes of the fourth century B.C. that they had one man to one oar and were, in fact, enlarged from, and similar to, triremes,⁴⁹ as shewn by the transference of equipment generally (*σκεύη*) from one to the other at Athens. However, beyond the fact that the Athenian quadriremes were efficient, all the evidence we possess that throws any light on the nature of any of the larger polyereis is later than the fourth century,⁵⁰ or rather is not earlier than the building by

with a *παρεξαιρεσία* half carried away, no spare oars but deck sweeps would (on the view I take of a trireme) have been of much use. Possibly however a trireme rowed 25 groups of 3 oars each side, and carried some half dozen spare oars of each class.

⁴⁵ And if we had, it would be a cataphract, and so could not shew any rowers.

⁴⁶ *C.I.A.* vol. 2 part 2, 812 a 35: *οὐ[το]ς τὴμ μὲν τετρήρη ἀποδέδωκεν τὰ δὲ σκεύη ὀφείλει διὰ τὸ [ἐπὶ] πεντήρη κατασταθῆναι*. The *σκεύη* here include the *ταῖρος* which had been previously mentioned. 812 c 143 *seq.* 'Ἡδεῖα. . . . [οὐ]τος τὴν τριήρη ἀποδέδωκεν διὰ τὸ

ἐπὶ] τετρήρη καθεστηκέναι [τὰ δὲ σκεύη] ὀφείλει (here follow the *συντηρήραρχοι*) *σκεύη ἔχουσι ξύλ[ιν]α ἐντελέη*. . . - There is another passage to the same effect, and the filling up of the lacunae is quite certain. Incidentally, this disposes of every reconstruction of a trireme which cannot be expanded into a quinquereme.

⁴⁷ Rarely mentioned, and only in the last extant list.

⁴⁸ Diod. 14, 41.

⁴⁹ Here we undoubtedly meet Assmann's *breitpolyereis*.

⁵⁰ I shall find it convenient to talk of ships of the fourth century, prior to Antigonos' fleet,

Antigonus and Demetrius of the fleet which afterwards fought victoriously at Salamis. Meanwhile there is no evidence for any ship larger than a hexeres⁵¹ prior to this fleet of Antigonus'; and I fancy that even the mention of hexereis is probably an anticipation of events.

D.

Taking the battle of Salamis (306 B.C.) for the moment as a convenient mark of time, what evidence can we get as to the larger polyereis later than this battle? So far as we have gone, we are at liberty to suppose more than one man to one oar in the larger polyereis in the last three centuries B.C., subject to this, that, as in a fourth century *πεντήρης* one man rowed one oar, we must not suppose that the same word at a later time had a different meaning unless evidence appears to that effect. I give in this section such evidence as I know of as to the larger polyereis in the last three centuries B.C., the effect of it being to make it probable that they were galleys a scaloccio of some kind with more than one man to an oar, and to make it, I think, reasonably certain that the accepted theory is quite at variance with the facts.⁵²

(a) Some men in some ships stood at the oar, and were therefore rowing oars a scaloccio. It was the chief merit of Weber's book to call attention to the passage in Appian that proves this. When the sea got up (he says), Salvadienus' inexperienced crews could neither *keep their feet* nor 'come forward.'⁵³ Note that Appian is not caring about informing the reader whether they stood or sat; he merely uses *ἑστῶτες* as an illustration, by the way, of how bad the tide was; he refers to it as to a well-known thing. Such a reference can hardly ever be anything but correct. Unfortunately, the

simply as ships of the fourth century. It will not create any confusion.' For our purpose the third century begins with Salamis.

⁵¹ Aelian *V.H.* 6, 12: Dionysius II. had a fleet of 400 ships, hexereis and quinqueremes; this is of course impossible, and it must mean 'including hexereis and quinqueremes'; see Diod. 16, 19. Even so, the statement as to hexereis is extremely improbable, seeing that Alexander never had anything larger than a quinquereme. Very possibly Dionysius II. had built one hexeres on the fourth century system (whatever it was), as a 'royal ship.' The statement of Pliny *N.H.* 7, 56, that Alexander invented the dekereis, is valueless; see Luebeck 1, 17 n. 6 and Droysen 272 n. 3, who give the evidence as to Alexander's fleets. It is precisely what *would* get stated about Alexander, and is on a level with Curt. 10, 1, 19, the 700 heptereis carried over in sections to the Euphrates; this last is refuted, were refutation necessary, by Arr. *Anab.* 7, 19, who gives the

correct version (from Aristobolus).

⁵² Many writers have *assumed*, on the ground of practical necessity, that in the larger polyereis more than one man rowed one oar; but that is another matter. Serre and Weber try to shew that Ap. Rhod. 1, 396 means two men to an oar; but there is no foundation whatever for this. The passage, a straightforward one, had already been correctly explained by Cartault.—Possibly the Delos ship of Paus. 1, 29, 1 would be in point, if one knew what the passage meant; but I cannot translate it, and Frazer's translation 'decked for nine banks of oars' conveys no meaning to me. Pausanias had of course heard of higher values, and therefore the ship was abnormal in some way; *νικῆσαντα* does not mean 'larger than' but 'more curious than.'

⁵³ *b.c.* 4, 85 (battle between Sextus Pompey and Salvadienus); *ὅτε ἑστῶτες βεβαίως ὑπὸ ἀηθείας, ὅτε τὰς κώπας ἔτι ἀναφέρειν δυνάμενοι.*

size of Salvidienus' ships is not stated, though they are said to be larger and heavier than those of Sextus: we must therefore consider the alternatives, taking two things as fixed points, *viz.*, that for serious work no man ever stood at an oar if he could possibly sit, and that five men to one oar cannot all sit through the stroke.

First, can the ships in question be merely triremes?

Fincati gives an account of the Venetian zenzile triremes, three men on a bench rowing three oars; extremely long oars, with leaded handles; he gives the lengths as 32, 30½, and 29 feet, and proves these extraordinary figures from Venetian arsenal-lists. Obviously, with such oars the stroke must have been a slow one; and Fincati states (p. 167) that they rowed a stroke called *monta e casca*, rise and fall.⁵⁴ Were then the ships of Salvidienus in question triremes, rowing the stroke called rise and fall?

This can I think be disproved. The oars of a trireme, whatever their exact length, were certainly very short compared to the Venetian, perhaps not more than half the length;⁵⁵ and there would be no point in rowing so cumbersome a stroke, for with the shorter oars the crew of a trireme could certainly have rowed sitting. That they *did* row sitting is clear from this, that on occasion they could row a really fast stroke,⁵⁶ which would not be possible except sitting. And if they ever could and did row sitting they would certainly do so when it was rough. What applies to triremes applies a fortiori to smaller ships.

Suppose then that Salvidienus' ships were quinqueremes on the model of the fourth century Athenian quinquereme. Then, taking two other fixed points, *viz.*, that three of the ordines were identical with those of a trireme, and the oars in the other two only slightly longer,⁵⁷ we again get the fact that the men could have, and therefore would have, rowed sitting, or at most in the case of the longer oars with some such slight lift from the seat as some men are apt to give in the first stroke of a race. This might conceiv-

⁵⁴ 'Vogue dans laquelle la force sur l'aviron est produite presque tout entière par le poids du rameur, qui, monté debout sur la pédague ou sur le banc qui précède, se jette en arrière, et, tirant à lui son aviron, va tomber assis sur son propre banc.' The lead may have been used to meet the difficulty of the oars being of different proportionate lengths inboard. How this was met in a Greek trireme does not appear; the only actual reference to lead is with regard to the thranite oars of the *τεσσαράκοντήρης*.

⁵⁵ The length of the *περίνεα* oars, 4.4 m., is the only one actually known, but this supplies a kind of limit. Schmidt has an interesting attempt to work out the measurement from the data as to the Athos canal in Herodotus and Demetrius of Skepsis; he makes the longest

oars in a trireme 3.3 m. outboard.

⁵⁶ There are of course a great many references to spurting, and the common name for it, *ροθιάζειν*, implies a fast enough stroke to make a good deal of splashing. The celebrated feat of an Athenian trireme, which swung round a merchantman and rammed her pursuer (Thuc. 2, 91) implies a quick lively stroke and a power of backing water on one side only quickly and forcibly. And the fact that a crew could only last a short time in action (*e.g.*, Polyæn. 3, 10, 12, Diod. 13, 77, Frontinus 2, 5, 47) conclusively implies a fast stroke. Chabrias, training rowers for a trireme, trained them sitting; Polyæn. 3, 11, 7: and *cf.* Aristophanes' reference to 'that which fought at Salamis.'

⁵⁷ See n. 110.

ably satisfy the passage in Lucan *Phars.* 3, 543, 'in transtra cadunt et remis pectora pulsant,' but it will not satisfy Appian's ἐστῶτες.

If then the ships were quinqueremes or higher values differing from the quinqueremes of the fourth century—and no other alternative now remains—the only reasonably probable explanation of Appian is that enough men rowed one oar for some at least to be on their feet some part of the stroke—if not throughout it—i.e., five men to an oar.⁵⁸ I regret the conclusion, as it involves saying that πεντήρης meant one thing in the fourth century and another in the first; but we have seen that this was certainly the case with δίκροτος, and we shall find other reasons for supposing it to be correct. Incidentally, Appian is conclusive, I think, against a theory such as that a quinquereme was a three-banked ship with oars rowed by 2, 2, and 1 men respectively; for 2 men can sit to any oar.

(b) The larger polyereis were not only of very shallow draught,⁵⁹ but low in the water also. The shallow draught is now generally admitted; the lowness in the water (a necessary consequence, by the way), requires consideration.

Polyb. 2, 10. The Illyrians, fighting with the Achaeans, lashed their lemboi together by fours and let the Achaeans ram. As soon as an Achaean ship was held fast by its ram the Illyrians leapt on her deck (ἐπιπηδῶντες ἐπὶ τὰ καταστροφώματα) and in this manner captured four quadriremes and sunk a quinquereme. The quinquereme then was but little higher than the small light lemboi.⁶⁰

Polyb. 16, 4 (battle of Chios again). It would have gone hard with the Macedonians had they not stationed lemboi among their cataphracts: as soon as the battle became a mêlée, and the Rhodians could no longer manœuvre, the lemboi attacked them, even meeting them bow to bow: this the Rhodians met in a workman-like way.⁶¹ I shall come to this

⁵⁸ There is a fine picture of a mediaeval quinquereme, with 5 men to an oar, on Pl. VII. of Furtenbach's *Architectura Navalis*, 1629; with a huge outrigger, and the oarsmen on their feet. A good description of such a quinquereme in Bigge, *Der Kampf um Candia in den Jahren 1667-1669* (Kriegsgeschichtliche Einzelschriften, Heft 26, 1899), p. 130: the men worked in three relays, as in a trireme. I owe the reference to these writers to the kindness of Mr. W. C. F. Anderson. For the scaloccio galleys generally, see Admiral Jurien de la Gravière, *Les derniers jours de la marine à rames*, 1885; the different strokes in use (none rowed sitting) are described p. 231 seq., the best of commentaries on Appian and on Lucan, *Phars.* 3, 543.

⁵⁹ Quinqueremes run ashore and the crews depart, Polyb. 1, 51; 3, 96; etc. Attalus' royal flagship at the battle of Chios (size not given, but following the usual Hellenistic practice [see too Beloch, *Gr. Gesch.* iii. pt. 2,

p. 428 n. 2] it would be the largest he had, and he had quinqueremes) runs ashore and the king and his crew departed (ἀπεχώρησε); Philip tows her off uninjured (Polyb. 16, 6 and 7). Diodorus 20, 47, Demetrius sails to Cyprus and draws his ships ashore and surrounds them with a palisade and ditch; he had heptereis and hexereis, and no preparation made for drawing them up. Frontinus 1, 5, 6, Duilius' ships (quinqueremes anyhow) cross a boom at Syracuse. Ath. 204 c, the dock of the tesserakonteres was only four cubits deep. Livy 30, 25 is not against this; the quinquereme there was damaged because driven ashore at full speed.

⁶⁰ Lembos small and cannot have had more than one bank: Livy 34, 35, and evidence collected by Torr s.v.

⁶¹ ἐμπιπτόντων αὐτοῖς τῶν λέμβων ποτὲ μὲν εἰς τοὺς ταρσοὺς . . . ποτὲ δὲ πάλιν εἰς τὰς πρῶρας . . . , κατὰ δὲ τὰς ἀντιπρῶρους συμπτῶσεις ἐποίουν (the Rhodians) τι τεχνικόν.

presently. Polybius is speaking here of the Rhodian wing. The Rhodians and Attalus together had in action three triremes, nine trihemioliai, and sixty-five cataphracts, by which larger ships than triremes are here meant; and 16, 5, shews plainly that the Rhodian ships attacked by the lembos were, or included, quinqueremes. A lembos then could meet a quinquereme bows on, and the two must therefore have been of approximately equal height. On the accepted theory it would be like a destroyer trying to ram a cruiser bow to bow.

Caesar *b.g.*, 3, 14. The sterns of the ships of the Veneti (which were real ships, not galleys, though shallow bottomed) were higher than the tops of the turrets on Caesar's galleys. The size of Caesar's galleys is not given, but as they carried turrets they cannot have been small ones.

Plut. *Ant.* 67. Eurykles in a Liburnian pursues Antony, then on Cleopatra's flagship, converses with him, and threatens him with a spear. Plutarch evidently conceived of the heights as not unequal, especially as Eurykles then attacks the second Egyptian flagship and spins it round like a top (*περιεπρόμβησε*). Add perhaps Diod. 20, 50 (battle of Salamis in Cyprus): those on deck spear their enemies in the water; and Val. Max. 1, 8, b, 11: a rower, engaged in baling out a Tyrian hexeres, was swept overboard by a wave. As they had no pumps,⁶² he must have been baling from the deck with a bucket; presumably she was very shallow.

Now as to the evidence generally quoted for the *height* of the larger polyereis, *viz.*: Livy 30, 25, Cic. *Verr.* 2, 5, 34, Orosius 6, 19, Dio Cass. 50, 33; (I know of no other; no one, I think, has thought it advisable to cite Vergil on Actium).

Livy 30, 25. Three Carthaginian quadriremes attack a Roman quinquereme; she was too speedy to ram, and the men in their armour could not board her as she was the taller ship.⁶³ The height here is of course only relative to a quadrireme; and as you could board a quinquereme from a lembos you could of course do so from a quadrireme. Unless the point is the word *armati*, the most probable explanation is, that she had her turrets on board.⁶⁴ Anyhow, the passage affords no evidence for the supposed considerable *actual* height of a quinquereme.

Cic. *Verr.* 2, 5, 34. Cleomenes ran away from the pirates, and the

⁶² One of the wonders of Hiero's ship was the water-screw invented for her by Archimedes, *Ath.* 208 f.

⁶³ Sed neque rostro ferire celeritate subterlabentem poterant neque transilire armati ex humilioribus in altiore navem.

⁶⁴ First mention of turrets, battle of Chios (201 B.C.) Polyb. 16, 3, *πυργούχων* (unless *πυρσούχων* be the correct reading). The best commentary on Livy here is the battles of Mylae and Naulochos in App. *b.c.* 5. At Mylae, though some of Sextus' ships carried towers, they were on the whole much lower

and lighter than Agrippa's; and the point of Sextus' epigram (108), that he had been storming forts, not fighting ships, was Agrippa's turrets. He gave orders *τι προσθήσειν ἐς τὰ τῶν νεῶν ὕψος*, and by the *height* of the ships' turrets are clearly referred to, for at Naulochos all his ships carried turrets, and could only be distinguished from Agrippa's by the war-paint (121). This seems to shew that *altiore* is quite satisfied by turrets. The accounts of Actium shew the difficulty of boarding ships carrying turrets.

pleader's case is to magnify his force so as to emphasise his cowardice. His quadrireme, the only *navis constrata* in the squadron, would, if he had joined battle, have appeared as big as a town among the pirates' myoparones. There is of course nothing in this bit of rhetoric about *urbis instar* the moment the context is read.

Orosius 6, 19⁶⁵ and Dio C. 50, 33. The Orosius passage was taken by Assmann to prove that the height of a *dekeres* (*dekereis* being the largest ships in Antony's fleet) was 10 feet. What Orosius says is that Antony's *dekereis* were *actually* 10 feet high; which is quite another thing. Antony's ships created the impression of being the largest ever seen, as appears in every account of the battle; according to Dio Cass. 50, 23, Antony, being aware that Octavian had crushed Sextus Pompey by sheer size and weight,⁶⁶ resolved so to crush Octavian, and outbuilt him; a good deal of the speech put into Antony's mouth before the battle by Dio (50, 18) is taken up with boasting of the size and height of his ships and their towers, on the disadvantages of which Octavian in his turn expatiates (50, 28). If these monster *dekereis* were 10 feet high, what was the height of an ordinary *dekeres*, and how low in the water was an ordinary quinquereme? Supposing Orosius to be correct, a sentence more decisive against the accepted theory was never written. Then Dio 50, 33; when the fleet was broken up, and each of Antony's ships was surrounded, it was like forts or islands being besieged—a consistent part of the picture, but implying nothing further as to height; the reference in *τείχεσι* is to the turrets,⁶⁷ to which also Orosius' measurement might possibly refer.

(c) A warship, of shallow draught and low freeboard, very long, was light and crank.⁶⁸ Livy 36, 44; two of Polyxenidas' ships attack Livius' flagship; he wishes to throw grapnels, and bids his men steady their ship for the encounter by keeping their oars in the water.⁶⁹ Any rowing man will see at once what kind of a 'ship' this implies. Plut. *Ant.* 67, before cited: a Liburnian spins the Egyptian flagship⁷⁰ round like a top. Demetrius' heptereis are drawn ashore anywhere; and Archimedes' grapnel could lift a

⁶⁵ *Classis Antonii centumseptuaginta navium fuit quantum numero cedens tantum magnitudine praecellens. Nam decem pedum altitudine a mari aberant.*

⁶⁶ Battles of Mylae and Naulochos in App. *b.c.* 5; and see n. 64; Dio Cass. 48, 47, 4 and 49, 1, 2: the evidence is overwhelming that for a few years there was a great race in building; not only as regards height, but more especially in weight and thickness, see Plut. *Ant.* 65, 66. I do not know why it is believed that Octavian had only light ships at Actium. He had the fleet with which he had crushed Sextus; up to hexereis, Florus 2, 21 (4, 11). Plut. *Ant.* 62 is responsible for the other view; probably adopted to rub in the moral.

⁶⁷ Whether Sextus in fact ever spoke of *τείχομαχῆσαι* or not, it became a commonplace; see *τείχομαχία* in Plut. *Ant.* 66.

⁶⁸ Polyæn. 3, 11, 13 (if the rowers sprang up in a hurry they might upset the ship), presumably refers to a trireme; nor do I lay stress on Lucan, *Phars.* 3, 665: if she took in drowning men she might turn over.

⁶⁹ *quum inferrentur, demittere in aquam remos ab utroque latere remiges stabiliendae navis causa jussit.* App. *Syr.* 22, gives 3 Syrian ships, not 2, and says that it was they who tried to grapple Livius.

⁷⁰ Size not given, but the flagship of any Hellenistic monarch was always the largest obtainable.

quinquereme half out of the water. Arr. *Anab.* 7, 9, Alexander has quinqueremes carried in sections from the Mediterranean to the Euphrates.

(d) The arrangement of a quinquereme was simple; there was none of the complexity of structure that five superposed banks would involve.⁷¹ At the battle of Chios the Rhodians met in a workmanlike manner the lemboi which rammed them bow to bow: they sunk their own rams under water, and so, while struck above the waterline themselves, they struck their enemy beneath it.⁷² Polybius is explicit that they did this *during* the fight; besides, they cannot have gone into battle with their hulls weighted down, as it is stated that at the beginning of the action their pace enabled them to row round their opponents. The only way a ship can lower its *whole* freeboard during action is by taking in water, as was done *e.g.* by the Huascar when bombarding Callao; this is out of the question, as quinqueremes cannot have had double bottoms, and also had no pumps. They lowered their rams then by shifting ballast forward, either live⁷³ or dead;⁷⁴ whence it follows that the system of oars was such that, with the bow depressed and the stern raised, the ship could still be rowed enough to keep her stem on to a speedy enemy. How this could be done in a boat having five superposed banks is incomprehensible; and any one who thinks that it could ought to work it out and demonstrate it. It implies some system in which, on the spur of the moment, changes of level and angle can be met; and this certainly implies among other things that all the oars were a reasonable height above the normal waterline, a state of facts demanded also, not only by common sense, but by the evidence that exists of changes in the waterline.⁷⁵ On the accepted theory, the lowest portholes forward of

⁷¹ This is presupposed by the pace at which a fleet could be built; for which there is plenty of evidence (no doubt sometimes exaggerated) beside the first Punic war. Elaborate arrangements for building were not required; Dio Cass. 48, 49, Octavian built ships *ἐν πάσῃ τῇ παραθαλασσίῳ Ἰταλίᾳ*; and no doubt the building of the Argo in Ap. Rhod. 1, 363 *seq.* is copied from current Egyptian practice.

⁷² n. 61 (continues) *αὐτοὶ μὲν γὰρ ἔμπρῳα τὰ σκάφη ποιοῦντες ἐξάλους ἐλάμβανον τὰς πληγὰς, τοῖς δὲ πολεμίοις ὕφαλα τὰ τραύματα διδόντες ἀβοηθήτους ἐσκεύαζον τὰς πληγὰς.*

⁷³ Like a modern racing yacht. See Frontinus 1, 5, 6; Duilius, to get his ships (including presumably quinqueremes) over the boom at Syracuse, shifts the troops aft, thus raising his bows, and goes at the boom at full speed, shifting the troops forward again at the critical moment. If this be true, a ship with bow raised and stern depressed, *i.e.* with every angle altered, could still get on a good deal of pace. It has, I understand, been demonstrated that a torpedo boat rushing an

ordinary floating boom at full speed may be expected to 'jump' it without doing herself any serious injury.

⁷⁴ Cf. Arr. *Anab.* 2, 19. If this be so, it implies that the ballast was easily got at during action.

⁷⁵ Those who speak of a row of portholes of 10 inches (.25 m.) (Assmann) or any such height above the (normal) waterline cannot really have thought what this would mean. Leaving practical considerations aside, the waterline was no more a constant quantity then than now. Polyb. 1, 60-62, the Carthaginian ships were much hampered by being loaded down with corn and stores which Hanno had trusted to put ashore before engaging. Diod. 20, 49 and 83, Demetrius mounts on the prows of his ships great catapults (*τοὺς τρισηπίθιμους τῶν ὀξυβελῶν*), and of course ballasted the sterns accordingly. So Duilius' *corvi*. App. *b.c.* 5, 121, Sextus Pompey's men throw over the turrets when escaping, shewing that they had been too low in the water. See too an appendix to Kromayer's article in *Philol.* for 1897, before

these Rhodian ships must have gone under water. This passage, in my opinion, certainly requires these quinqueremes to have been scaloccio galleys of 5 men to an oar, with the oars a reasonable height above the (normal) waterline.

(e) Finally there is Livy 28, 30.⁷⁶ Caught in some eddies, a Roman quinquereme nevertheless held her way better than the Carthaginian triremes, and was more manageable; and Livy's second reason no doubt is right; there was more *power* behind the oars, and the fact that she was normally slower than the triremes had become immaterial. A greater number of one man oars would not have helped in the eddies relatively to the triremes; the required meaning is more power to *each* oar. She must then have been a scaloccio galley.

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cited, on the great numbers of troops that could be carried at a pinch.—I do not give cases, like Marcellus' sambucæ before Syracuse, where the ships were not in action: though Marcellus' quinqueremes could still be rowed: Polyb. 8, 4(6).

⁷⁶ Quinqueremis Romana, seu pondere tenacior, seu pluribus remorum ordinibus scindentibus vortices, quum facilius regetur, duas

triremes suppressit, etc. (For ordines remorum see under *E*). A little before, Livy had said she was slower than a trireme. Fincati p. 158: according to Nicolo Surian (1583) a quadrireme a scaloccio could beat a trireme a scaloccio but not a trireme a zenzile. It is just possible that these triremes were a scaloccio (n. 120) and owed their pace to the greater skill of the Carthaginians; but I think most improbable.

(*To be continued.*)

HERACLES AND THE APPLES OF THE HESPERIDES: A NEW TYPE.

OF all types of Heracles in Greek art, that with the apples of the Hesperides is perhaps the most familiar. Yet in the archaic period it scarcely occurs,¹ and even in the fifth century, though the scene is often represented among the Labours,² when accessory figures are consequently present, there are few examples of the hero holding the apples in free sculpture.³ With the fourth century, however, the subject becomes common, for it is to Lysippus and his followers that we owe the type of the Wearied Heracles holding the apples, which has given rise to the popular conception. That this became the stock representation to the ancient world as to the modern we learn from Suidas⁴: καὶ γράφουσι δὲ δὸρὰν λέοντος φοροῦντα, καὶ ῥόπαλον φέροντα, καὶ γε μῆλα κρατοῦντα. The earliest representation of the type, best known from the Heracles Farnese, appears to be on a tetradrachm of Alexander,⁵ and there can be little doubt that its origin is due to Lysippus. The replica in the Pitti⁶ bears the inscription ΛΥΣΙΠΠΟΥ. ΕΡΓΟΝ. Moreover, the numerous copies we possess and the frequent appearance of the type on late coins imply an original of great celebrity. We know that works of Lysippus were more valued than those of any other sculptor, and the dramatic and pathetic character of the figure exhibits the tendency of art at the beginning of the Hellenistic age. Finally, the original stood in Corinth,⁷ which was the centre of the Sicyonian school.⁸ A certain heaviness of build and emphasis of muscular form characterize even the best and simplest replicas,⁹ and descriptions of the colossal seated figure of the hero, one of the most famous works of the sculptor, lay stress on similar features.¹⁰

¹ Only on two b.f. lecythi, (a) Braun, *Zwölf Basrel.* vignette to taf. XI.; (b) Benndorf, *Gr. u. sic. Vasenbilder*, taf. 42, 1.

² See Furtwängler, *ap. Roscher, Lexikon*, p. 2227.

³ A fine example, Myronic in style, is published in *Denkmäler*, 569-70.

⁴ s.v. Ἡρακλῆς.

⁵ *Num. Chr.* 1883, p. 9.

⁶ Amelung, *Führer*, p. 134, where the genuineness of the inscription is conclusively maintained.

⁷ B.M.C. *Corinth*, Pl. XXII. 5, *Num. Comm. on Paus.* Pl. F ciii. The statue is

almost certainly that referred to by Pausanias, (ii. 3, 2).

⁸ How favourite a subject it was with Sicyonian sculptors may be inferred from the fact that we have records of three Heracles statues and a group of the Labours by Lysippus, besides that under consideration. His son Euthykrates made a similar statue at Delphi (Overbeck, *Schr. Qu.* 1468-77; Plin. *N.H.* xxxiv. 66).

⁹ Those in the Uffizi (Amelung, *op. cit.* p. 31) and the Louvre (*Rev. Arch.* 1895, Pl. XIII.), which, however, lack the exaggeration of the better-known Farnese example.

¹⁰ See Overbeck, *Schr. Qu.* 1468-72.

Lysippus then popularized the type of Heracles with the apples, but he did not create it. As we have seen, it appears in some fifth century works, and in one or two belonging to the early fourth century,¹¹ but in all the apples were accessories. Certain reliefs, however, suggest the possibility of the existence of another type in which they were more prominent. By far the most important of these works, and the only one which calls for discussion in detail, is the Capitoline Basis,¹² one side of which is here reproduced (Fig. 1).

An archaizing work of a late Greek sculptor,¹³ the Basis is of considerable importance as reproducing early types far more nearly allied to sculpture



FIG. 1. (From the Capitoline Basis.)

in the round than to ordinary relief work, notably in the unimportance of the accessories and the prominence of the hero, whose figure stands out strongly from the background. In the scene of the gardens of the Hesperides he appears facing the spectator, and resting his weight on the left leg, with his head turned towards the right hand, which is upraised to pluck the apples. More sculptural in type perhaps than any other on the Basis, the figure at once suggests the possibility that works in the round may have

¹¹ For pre-Lysippic types of the fourth century, see Roscher, *Lexikon*, pp. 2164-5, to which should be added Amelung, *Mus. Chiar.* Pl. LXXXVII. The *Beardless* Heracles with the apples does not come within the scope of this paper.

¹² Badly reproduced in Visconti, *Mus. Pio-Clem.* iv. Pl. b II.-III.; there are careful wood-cuts in Righetti ii. 274-5, which are reproduced in *Sonderabdruck d. Denkmäler*, 569-70, a publication which I owe to the

courtesy of Dr. Arndt, who considers sculptural types to underlie the figures on the Basis. For the present illustration, the first photographic reproduction to be published, I am indebted to Mr. A. J. B. Wace of the British School in Rome. The Basis is placed in a very bad light, which made it difficult to obtain a satisfactory negative, so that it has been necessary to strengthen the photograph.

¹³ The marble is Greek, described in the official catalogue as Pentelic.

existed in which the same motive was adopted, the tree being, of course, omitted. Yet among over 400 figures of Heracles given in M. Reinach's *Statues Antiques* only one, the Heracles Albani, restored as holding a bowl,¹⁴ can from the position of the right arm¹⁵ be connected with this holding of the apples. This will be discussed later, so we can now turn to the coin types. Here again one figure only can belong to the type, a statue reproduced on two coins of Corinth,¹⁶ both representing the same work, a figure of Heracles standing in an attitude of repose and holding on his left arm his club and lion skin. The right hand is raised, but owing to the poor condition of both coins the motive is obscure and has remained unexplained. The bow is unsuited to a figure at rest; the bow placed in the hand of the Albani Heracles has no authority,¹⁷ and the wreath held in his upraised hand by the young Heracles on the coins of certain Greek kings of India¹⁸ does not suit here, as the arm is not sufficiently bent towards the head, nor is the motive, though appropriate to the youthful Praxitelean type of these coins, convincing in connection with the bearded Corinthian figure. If, however, we restore the right hand of the latter with the apples, we get a dignified and adequate motive, with the *αὐτάρκεια* of all Greek sculpture of a good period; it has nothing of the reliance for effect on the external pathos of weariness which belongs to the conception of the Lysippic Heracles. On one of the coins the figure is grouped with the Armed Aphrodite of Corinth,¹⁹ on the other with her and the Poseidon of Cenchreae;²⁰ therefore, 'as two of the deities in this group are copied from statues, there is a presumption that the third is also.'²¹ That the original was a work of note is clear from its recurrence on the coins in connection with two of the most famous works in Corinth. The pose is unquestionably Polycleitan, both in the position of the legs and the balance of the composition, and, poor as the coins are, there is in the figure a marked absence of the massiveness of build and somewhat theatrical lassitude characteristic of the Lysippic and later conceptions.²²

A bronze statuette in my possession (Fig. 2) here reproduced on the scale of the original, further illustrates the type.²³

The statuette was, it is stated, found by the late Mr. Sandwith in Cyprus, and included in the sale of his collection, when it was bought by the

¹⁴ There is a replica of this work in the Vatican, of which only the torso remains (*Mus. Chier.* Pl. LXXIV. No. 581).

¹⁵ The common type of Heracles brandishing in his right hand club or bow does not call for consideration here. It is quite unmistakable, and usually goes with violent action on the part of the figure.

¹⁶ *Num. Comm.* F CIV, FF XIII.

¹⁷ A drinking vessel is never held on a level with the head by a standing Heracles, but belongs to the seated or reclining type and to the *Bibac* of debased art.

¹⁸ B.M.C. *Bactria*, Pl. VI. &c.

¹⁹ *Num. Comm.* Pl. FF XIII.

²⁰ *id.* F CIV.

²¹ *id.* pp. 17, 26.

²² It is worthy of remark that the conception of Heracles as a small man—*μορφὴν βραχύς*—was known to Pindar (*Isthm.* iii. 90), so that colossal size would seem to have been a later development parallel with that of increased muscular force. Philostratus (*Gym.* 35) definitely reverts to the older and less exaggerated ideal, as contrasted with the ultra-Lysippic type dear to Roman amateurs.

²³ The figure leans somewhat too much to the right in the cut, which throws out the balance of the composition.

dealer from whom I procured it. Though of Graeco-Roman date, the work is unusually good²⁴ and despite the loss of the right hand and the lower part of both legs, well preserved. The hero stands on the left leg, with the right slightly bent; his head, covered with short close locks (not the conventional Heracles curls), is turned towards the missing right hand, which was raised. The eyes are in shadow and the face is carefully modelled, but there is of pathos not a trace. The treatment of the body is unusually fine for the class of work, with no exaggeration either of pose or muscle; the



FIG. 2.—BRONZE STATUETTE OF HERACLES.

modelling is schematic rather than realistic, and is marked by unobtrusive care for the general effect rather than by the anatomical emphasis of detail characteristic of post-Lysippic work.²⁵ The lionskin and club on the left arm are finished with great care, but they are genuine attributes, not the mere decorative accessories frequent in later types. A comparison

²⁴ This is especially true of the details, such as the locks of the lion's mane and the fingers of the left hand.

²⁵ It is true that the statuette is not unlike the Agias, but in that figure Lysippus was working on definitely traditional lines: its Polycleitan affinities are marked (Mahler, *Polyklet u. seine Schule*, p. 151). Moreover, the Agias, as an athletic work, would belong

to the earlier part of Lysippus' career. His artistic activity ranging from c. 368 (when Troilus won his second victory) to c. 312 (the portrait of Selencus I. as βασιλεύς), we can understand the difference between the Agias and the Hellenistic treatment of the Heracles Farnese, which corresponds with the Lysippus of literary tradition.

with the coins shows a minute correspondence between the two,²⁶ and suggests that the Corinthian statue, a famous work as we have seen, was copied in the bronze, just as the Lysippic Heracles of the Farnese type is reproduced in various statuettes. That the object held in the right hand was small may be inferred from the absence of any trace of it on the coins, so that, even without the evidence of the Capitoline Basis, the apples would be an obvious restoration. The modelling of the right arm of the statuette makes it certain that the hand held nothing which involved a strain, consequently the apples are again appropriate.

The pose of the statue suggests Polycleitan work, and the character of the statuette, despite the later influence visible in the head, confirms this view. The schematic treatment of the body with its simple and well marked lines, the powerful hip-sockets, the modelling of the back with its strong inward curve above the *glutei* and the depression in their sides, are, like the pose and rhythmic movement of the legs, purely Polycleitan. We have in a statue in the Chiaramonti Museum²⁷ an interesting example of a Bearded Heracles of this school,²⁸ certainly post-Polycleitan, but strongly influenced by the master's work. It is of especial interest in connection with the statuette as it also combines a Polycleitan body with a head of fourth century type. The likeness here is indeed close: there is the same treatment of the hair and beard in short wavy locks, the same broad nose and eyes set wide apart, the same absence of pathos—a sure indication of pre-Lysippic work in connection with the subject.²⁹ Two other Polycleitan works are of importance, from the fact that their pose is very similar to that of the statuette, though, both being youthful figures, minute comparison is impossible. In the Westmacott Athlete,³⁰ Furtwängler's 'Kyniskos,'³¹ and in the youthful Heracles of the Arundel Marbles, in the Ashmolean Museum,³² the raised right arm occasions a play of muscle and a balancing of the figure closely resembling that in our statuette, but it is interesting to find that the latter lacks the weak points of the statues, the exaggerated line down the middle of the body and the over-heavy hip-sockets,³³ while all their strictly Polycleitan points recur in the bronze.

²⁶ The only differences are that on the coins the lionskin is flung over the shoulder (whereas in the statuette it hangs from the upper arm) and the *Stand-* and *Spiel-bein* are reversed. But die-cutters are notoriously careless in matters of detail, of which one of the coins in question offers an instance. On *Num. Comm.* FF XIII the Armed Aphrodite holds her shield to the left, while on a whole series of others she holds it to the right (F CIV, G CXXII-CXXVI).

²⁷ Amelung, *op. cit.* Pl. LII.

²⁸ Furtwängler, *Meistertw.* p. 519; Mahler, *op. cit.* p. 144.

²⁹ It is a curious fact that all the Heracles statues which have been attributed to Scopas

are of the youthful beardless type, and both those known to be his, the head recently found at Tegea and the statue represented on coins of Sicyon, were the same.

³⁰ Mahler, *op. cit.* p. 44, with list of replicas.

³¹ *Meistertw.* p. 457.

³² I have to thank Professor Gardner for calling my attention to this interesting work (No. 33 in the Ashmolean, *Michaelis*, No. 39). The cut in Clarac (Pl. 790 No. 1970 A) is misleading, as it gives Guelfi's restorations, now removed.

³³ The soft treatment of the abdomen in the youthful figures is non-Polycleitan, but naturally does not occur in the statuette, which represents a more advanced age. The Arundel

The conclusion then would seem to be that we have in the statuette a copy of a Heracles of the later Polycleitan school erected at Corinth, holding aloft the apples of the Hesperides, a motive found in the Capitoline Basis, which appears to reproduce fifth century types. The same motive may give us the clue to the restoration of the Heracles Albani, a post-Praxitelean adaptation of an earlier conception,³⁴ when the instinct of the sculptor was no longer satisfied with a simple representation of the hero bearing the apples, but must add an elaborate fillet—the sign of victory—to complete his meaning, reduce the club to a plaything, and turn the lion-skin into an effective piece of drapery. In the statuette there is none of this dramatic appeal to the spectator, and, small as it is, there is in it something of the dignity of the original. Its *provenance* cannot be dwelt upon, as its presence in Cyprus must have been the result of accident, but type and school are alike interesting, and its positive merit is considerable, its relative merit great, when compared with the mass of Graeco-Roman bronzes. Other works may well exist which would, if published, further illustrate this suggested form of the myth of Heracles and the golden apples: the justification of the present paper must lie in drawing attention to the type, in the publication of a bronze which throws light on what must have been one of the great statues of Corinth, and in an accurate reproduction of part of a work so important and so neglected as the Capitoline Basis.

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Heracles, like the athlete, probably held a wreath, a motive used, as we have seen, for the youthful type on coins of the Greek kings of

India.

³⁴ Furtwängler, *Meisterw.* p. 575.

TOPOGRAPHY AND EPIGRAPHY OF NOVA ISAURA.¹

IF any confirmation were required of the evidence supplied by the first inscription published in the *J.H.S.* 1904, as to the ancient name of Dorla, it would be found in the Roman accounts of the siege of Isaura by Servilius Isauricus. Frontinus, iii. 7, 1, says that Servilius compelled the city to surrender from thirst, *flumine ex quo hostes aquabantur averso*. Now there are very few cases in which such an operation is possible. Three conditions must be fulfilled: (1) the city must be dependent for its water almost entirely on a river flowing through it or close to the wall; (2) there must be open ground on the opposite side of the river towards which the water can be diverted; (3) the operation must not be on so great a scale as to be beyond the power of an army such as Servilius had with him, a comparatively small and rather lightly equipped force, able to cross the Taurus from Cilicia, and operate on the northern flanks of the mountains. Tarsus, for example, in ancient times fulfilled at least two of those conditions: the river flowed through the city and could be diverted without very serious difficulty by an operation which was quite within the power of a Roman army. But, on the other hand, there is every probability that Tarsus was sufficiently supplied with water from wells to enable it to hold out against a siege, as the soil yields water everywhere at an easily reached level below the surface, so that the loss of the river-water would indeed be inconvenient, but not decisive in a military view. It is impossible that a large city like Tarsus could be supplied solely from the river, because the river-water would necessarily become to some degree polluted in its course through the city. The wells must have been in permanent use within the city. Again at Diñorna, where Prof. Sterrett placed Nova Isaura, the city was not dependent on a river, for the obvious reason that neither of the streams there is capable of supplying it with water. They were both quite dry when I passed through the place in 1890; and at no time during the summer can they ever carry much water. I believe that they are almost dry great part of the year. The city at Diñorna, like Tarsus, was undoubtedly dependent more on wells than on a river.

¹ This paper was intended to follow the one by Miss Ramsay on *The Early Christian Art of Nova Isaura*, *J.H.S.*, 1904, p. 260 ff., but

was crowded out. The numbering of the inscriptions is continued from that paper.

But at Dorla all the conditions are fulfilled. The ancient town of Isaura was situated on the high ground on the right side of the stream (which flows here north, and slightly east; not north-west, as Kiepert has it), and extended at least down to the river bank. On the left, or west side of the stream, opposite the city, an isolated hill rises in the midst of the valley. It would be an easy operation for Roman soldiers, accustomed to the use of the spade, to divert the river a few hundred yards above the city and make it flow on the opposite or western side of the isolated hill, entirely out of reach from the city. In its present and normal course the river would touch Isaura only for a short distance, and was thus less liable to pollution. It flows throughout the year with a good supply of water for the city. The city for the most part lay on the broad ridge east of the river, which slopes back very gently towards the last eastern ridge of the Isaurian mountains. The surface of this ridge must lie high above the level of the subterranean waters. Wells would here require to be deep, and could not be quickly made.

Further, Sallust in a fragment of the *Histories* mentions that Servilius occupied a mountain within javelin-throw of the city (*montem ex quo in forum oppidi teli coniectus erat occupavit sacrum Matri Magnae*).² This 'mons' is evidently the isolated hill on the left bank of the stream. From this hill the lower part of the city could be reached by javelins; and it is quite natural and probable that the *forum* (assuming that this conjecture is to be adopted) may have been in that part of the city. The hill rises from the left bank of the little river, and we understand that the city wall bordered the right bank.

The holy hill of Cybele, the Great Mother, therefore, was outside of the city; and was in all probability employed in Anatolian, non-Hellenic fashion as a cemetery. The dead returned to the mighty mother who bore them, as the Lydian chiefs, the sons of the Gygaean Lake, were buried on its shore, according to Homer; and it has been repeatedly shown that this idea is peculiarly and almost universally characteristic of native Anatolian religion.³ The way from the gate of the city, crossing the stream by a bridge at the same place where the modern bridge stands, and ascending the hill to the temple, was bordered, doubtless, by a line of graves the whole way; and thus the Greek fashion was united with the Anatolian; but besides that, it is probable that the whole hill around the temple was full of graves.

The Temple of the Great Mother, where on certain days she came to feast, was replaced by the Church, parts of which can still be seen amid the houses on the summit: it was impossible for us to tell how far the walls of the Church might still be traced, as careful exploration amid the houses was not within our power. It is unfortunate that the modern village is for

² The MS. reading is *fugam oppidi*. *Forum* is Hauler's emendation. Mommsen suggested *iuga*. The last may be right: *ingum* would suit the single broad ridge on which the city stood better than *iuga*, but the plural may be applicable. The sequel of the text is mutilated

and uncertain, *et in eo credebatur epulari diebus certis dea, etc.*

³ See e.g. remarks by the present writer in *B.C.H.* 1898, p. 236; *Cities and Bish. of Phrygia*, i. pp. 100 f., 361, 367, etc.

the most part built on the hill, covering up the most interesting ruins. Even as things are, there can be little doubt that £100 or £200 spent in excavation would reveal many of the ancient grave-monuments. The account given by the inhabitants unanimously is that in the open spaces between the houses the upper surface of soil, about four or five feet deep, covers over a mass of cut stones. The tomb of the Bishop Theophilus, No. 2, was evidently a monument of large size; and perhaps several, or even many, of the component stones were inscribed (No. 58 may belong to this monument).

Beside the great church on the top of the Hill of Cybele, there were of course others in the city. One of these doubtless stood on the site of the present mosque, close to the bridge on the left bank of the stream. It has been rebuilt, and the walls are full of tombstones; I imagine that nearly all of them are Christian, and that the city was entirely Christian in the fourth century. While the outer walls of the mosque seem to be rebuilt, the inner door is probably pre-Turkish. The stones of which it is composed are dovetailed (if the word may be used, where the form is so completely altered) in a very intricate style, which I take to be Byzantine. In the vestibule of the mosque, under the thick modern coating of white-washed mud-plaster, where this has partially scaled off, there appears an older coating of stucco, moulded in elaborate pattern, which I take to be Seljuk or early Turkish. Photographs of this pattern proved unsuccessful.

The situation of Nova Isaura, as now determined, illuminates the true character of the campaign of Servilius. Thinking of the enterprise as a mountain-campaign, I always found it a quite remarkable and hardly credible achievement at that period. Now an easier line of march is indicated as the probable one.

It was possible to advance on the Isaurian country from a basis in Roman possession either directly from the south coast, or from the Province of Cilicia, or from the Province of Asia. The first of these three routes may be set aside as improbable: the country was too difficult for an army, and offered too many opportunities to the natives to attack and destroy the invader in positions where not a blow could be struck or a weapon hurled in reply. The least difficult road would go round by Laranda, and thus would fall into the second route.

The second route would traverse the Cilician Gates, and pass through Cybistra, Laranda, Ilistra, and Derbe. Now Servilius, as Sallust says, captured another city, before he came to Isaura Nova; and if he had advanced from that side, the former must have been Derbe. No allusion to Isaura Palaia would in that case be contained in the fragments of Sallust that we possess.

The third route was from the Roman province Asia by the valley of the Maeander. Strabo, p. 568, mentions that Servilius captured both Isaura Palaia and Isaura Nova. Cicero, *de Lege Agr.* ii. 50, says that he added the *ager Oroandicus* to the Roman territory: this must be the territory of the tribe Orondeis, north-west from the Isaurian country and near Lake Karalis

(Bey-Sheher Lake).⁴ This might suggest that the line of advance was from the Asian side by Apameia, Apollonia, and Pisidian Antioch; and in that case the city which was captured immediately before Isaura Nova would probably be Isaura Palaia. But Sallust's description of the capture of that city through want of water does not suit well with the situation of Isaura Palaia (as Professor Sterrett has rightly pointed out, *Wolfe Expedition*, p. 151).

Accordingly the probability is that Servilius advanced from the eastern side by Laranda and Derbe, capturing the latter by thirst, which is entirely natural in its situation, thereafter advancing to Nova Isaura, only six or seven miles to the west. Thus he gradually penetrated the Isaurian country and proceeded to reduce also the Orondeis, before he returned to Cilicia (probably through Pappa and Iconium). He did not advance further to the north-west, because beyond Pappa he would soon come to the territory of Pisidian Antioch, which at this time was autonomous (Strabo, p. 577). The campaign, as thus pictured, suits with the fact that Servilius (as both Orosius and Eutropius say) ranked as administrator of the Province of Cilicia at this time.

It is also evident that Nova Isaura was founded (or grew to importance), because the site was in the nearest part of the Isaurian land to the open plain of Lycaonia and the great routes of communication that pass across it. Palaia Isaura always had been, and continued to be, the great fortress of the Isaurian territory. Nova Isaura in its delightful and convenient situation grew under the Roman rule from a village (as Strabo, p. 568, calls it) to be a bishopric. It struggled to maintain its rank as a city and bishopric independent of Palaia Isaura; and Basil of Caesarea favoured its claims; but it was forced to sink back into dependence, and an imperial decree (probably passed by Zeno about A.D. 474 and confirmed by Justinian) recognized and confirmed its dependence. This topic is discussed in an article on Lycaonia (*Oest. Jahresh.* 1904 Bb. p. 77 f.).

The territory of Nova Isaura included, besides a tract of hill-country wholly unknown, the land of the modern villages, Dinek, Dinek-Serai, and Alkaran or Algeran. Dinek lies almost due west of Dorla, about two or three miles distant. Dinek-Serai is north-west of Dorla, and two miles north of Dinek, on the high south bank of Tcharshamba-Su, with a good bridge. Alkaran lies nearly due north of Dorla, almost eight kilometres distant. Seven kilometres north-north-east of Alkaran is another bridge over Tcharshamba-Su, called Baltcha-Assar. Here a village of Roumelian refugees was built in 1902. This bridge lay outside Isaurian territory, in the open Lycaonian plain; and everything here is different in kind and period. To show how different are the remains of an ordinary Lycaonian village of the plain from those of Isaura Nova, I add at the end the series of inscriptions from Baltcha-Assar. They belong to the fifth or following century.

The reason why the art and writing of Nova Isaura came to an end

⁴ See *Pisidia and the Lycaonian Frontier*, § 9, § 22, *B.S.A.*, 1904, pp. 254, 266.

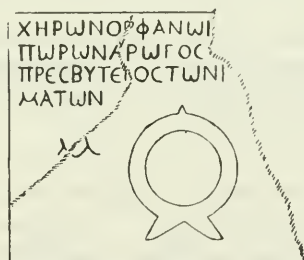
about 400 to 450 A.D. is obscure. We must connect its fate with that of Korna, also a bishopric until shortly after 381. Both towns have a similar situation; both were important under the Roman Empire; both ceased to be bishoprics during the fifth century. The culture and art of Nova Isaura ceased along with its independent rank.

39.—Dorla. R. 1901. Letters worn, faint, and hard to read.

| | |
|---------------|------------------|
| ΤΟΝΠΑΣΙΦΙΛΟΝ | τὸν πᾶσι φίλον |
| ΚΕΗΔΥΕΠΗ | κὲ ἡδυεπῇ |
| ΨΥΧΗΝΤΘΚΕ | ψυχὴν τ[ε?] κὲ |
| ΚΑΙΔΙΩΝΑΡΔΕΝΤ | κα[τ' α]ἰῶνα? |
| ΕΝΤΙΜΩΣΕΣ | ἐντίμως ἐ[. . . |
| ΤΕΣΑΝΤ | τ[ῆ]σαντ[α] |

ψυχὴν, which is here used in the sense of a man, person, is construed as masculine. I sought vainly for this interesting inscription in 1904: the stone was reported to be destroyed. It seems to be complete, and l. 4 seems to hide the name of the deceased, while his office is described in ll. 5, 6. The epithets *πᾶσι φίλος* and *ἡδυεπής* are given to bishops in Nos. 2, 3, 4; but ἐ[πισκοπή]σαντα does not suit the traces here well; and ἐντίμως implies a lower office, see No. 4. The inscription is one of the latest, with square □ in one case at least; and the epithets formerly applied to bishops have here perhaps degenerated so as to suit a lower ecclesiastical office. The stone is perhaps of the fifth or sixth century.

40.—Alkaran: in the south cemetery. R. 1904: in three parts, one of which has not been found.



χηρῶν ὀρφανῶ[ν ξ]ῶν ταλαι-
 πώρων ἀρωγός, [name of deceased, and perhaps his father
 πρεσβύτε[ρ]ος τῶν ἱ[ερῶν ἀναλω—(or χρη-)
 μάτων
 μ(νήμης) [χ(άριν)]

We found the left-hand fragment of this stone first. The unusual interest of the inscription was evident; and, in the hope that the other parts might be discovered, we sent to the village for implements, and proceeded to dig round the grave and to examine every scrap of stone of the same colour. After a time the central fragment was found; but the rest remains unknown.

Except for the name of the deceased, however, the run of the text is apparent. The stone stood on the grave of a presbyter, probably of Isaura Nova; he is defined as having the duty of superintending the church expenditure. Prof. Cumont suggested *πραγμάτων*; but probably *ἐπί* would be needed with that word, whereas *ἀναλωμάτων* can be better used without *ἐπί*. I sent the inscription to him as soon as I found it, and our restorations of line 3 were made independently. The restoration of line 1 is due to Prof. Cumont. Prof. A. Souter, to whom also I sent the text, suggested independently [*καὶ ταλαί*] in line 1; and this may be right, as the other restoration is too long, if the garland was exactly in the middle of the stone. But the garland may have been a little to the left and then there would be room for [*ξένων ταλαί*], which is on the whole preferable as a reading.

The first lines give the character of the deceased presbyter as a Christian; the third defines his duty as an official, and shows that in this region, as early as the middle of the fourth century (the probable date of this inscription, see 41, note on line 7), the presbyters in a city had special kinds of duty assigned to them. This suggests that the clergy were already separated as a distinct order from the laity, which accords with the inference drawn from the use of *ἱερεύς* and *ἀρχιερεύς* in the note on No. 41, line 2. If the Acta of S. Theodotus of Ancyra be authentic, the separation of the two classes was not complete in a rustic part of Galatia about A.D. 300; but North Galatia was beyond doubt less advanced in development than Lycaonia at this period. In the Byzantine time, however, Galatia and the northern regions of the central plateau advanced rapidly in importance, while Lycaonia retrograded.⁵

Prof. Cumont compares with the remarkable title in line 3 the phrase used in the *Apostolic Constitutions*, ii. 35: *διοικητῆς τῶν πραγμάτων ἐκκλησιαστικῶν*.

The use of the garland in this rude form on tombstones of Isaura Nova seems to be a characteristic of fourth century work, and especially about 350 or later; see Nos. 19, 22, 26. In No. 2 we have an earlier and better form, and in Nos. 3, 4, an intermediate form.

41.—Dinek-Serai. R. 1901: engraved on a stone in the common Phrygian form of a sepulchral altar. The stone has been split down the middle: the left half (*a*) is built into the wall which surrounds a small garden, and the right half (*b*) forms part of the pavement beside the door of the house within this garden. The letters are difficult to read, being very faint; and the position of part (*b*) is such that it is impossible to get a close view of the letters except upside down. I had only taken a first hurried copy of the two parts,⁶ when the owner, who had already been paid too liberally, refused to permit further work, unless I gave him ten pounds. As

⁵ See *Histor. Geogr. of Asia Minor*, p. 74 f., *Arch. Jahreshfte*, 1904, *Beib.* pp. 91, 105.

⁶ I was copying part (*b*), and had not finished, when my men told me they had found part (*a*). I went to see it, found it was (as they suspected)

a piece of the same gravestone as (*b*), and made a first copy of it. When I proposed to return to (*b*) the owner interfered; and to save long delay and bargaining or force, I desisted.

the inscription seemed to be a mere metrical epitaph of the usual valueless kind, I was loath to bargain with him, all the more so, as he would have been hard to deal with. If, however, the partial restoration here given is correct, the epitaph is an important Christian document of the fourth century, and ought to be recopied. It is to be found at one of the most western or south-western houses in the village. In the circumstances I cannot guarantee that the size of the gap between the two fragments is accurately indicated in every line. In l. 8 there is no gap, as Η is divided. Many of the suggested restorations are quite uncertain.

ΕΝΕΠΩΠΑΡΙΟΝΤΙΦ // ΟΕΧΑΙΡΕΝ

//ΕΡΕΥΕΝΑΡΟ

ΕΝΟΙΣΕΨΛΕΜΟΙΧΑΓΡΕΑ// ΟΠΡΟΣΕΛΟ

ΕΕΣΣΙΜΑΘΩΝΔΕΣΑΦΙ//ΟCOTΙΝΕCΤΩΡΑ

5 ΤΕΡΟΣΜ ΤΡΙΩΝΧΗΦ//ΩΝΕΠΑΡΙΚΙΤΟΣ

ΚΡΑΤΗCΟΔΙΑΚΟΝΟ//CΕCΘΛΟΣ ΠΟ

ΗCΘΗCΑΥΡΟCΕΠΑΡΧΙ//ΙCΕΠΙΛΕΚΤΟΣ ΔΟ

ΑΝΙΟΥΟΔΙΔΑCΚΑΛΟCΗ//ΗΙΘΕΟΙCΙΝ ΚΑΙCΟΦΟΣ

CΓCΙΔΙΑCΠΟ ΟCΕΠΛΕΤ//ΟΠΙCΤΟC-ΗΓΕΜΟCΙΝΞ

10 ΑCΙΔΕΜΥΡΙΑΦΥΛΑ ΚΑ//ΛΗΗCΘΕΙCΦΙΛΟΤΗΤΟCΕΜ

Η CΟΦΙΗCΤΕ΄CΠC ΙCΥ// ΜΟΙCΤΕΝΑΧΩΝΑ ΟCΥ

ΝΤΑΛΙΧΑΙΦΩΝΛΗΜΕΤ//ΕΡΗCΦΙΛΙΗC΄ΕΛΝ-ΗΜΕΝΟC

ΑΠΑΠΑΝΤΑ΄ΤΗΗC //ΜΗΗΝΦΙΛΑΔΕΛΦΟΝ

ΟΠ ΤΗΗΝ //ΗΛΕΦΙΔΗΗΜΑΜΜΕΙΝ

15 //ΗΝΕΝΚΡΑΤΗCΟΙΚΟΝΟΜΟΝΟC

//Μ ΜΗC:ΧΧΑΡΙΝΟΕΡΑΠΕΝΑ

//ΟCΕΝΥΜΝΟΙCΑΤΕΗCΕΝΑΠΟCΦΕΙ

// ΜΑΤΑΚΑΛΛΗΙΑCΟΥCΙΚΑΙΕCCOΜΕΝ

ἐλπίδα τήνδ' ?] ἐνέπω παρίοντι φ[ίλοισί τ ?]ε χαίρειν.

ἐν ταύταις ? ἰ[έρευνεν ἀρο[ύραις ?

ἐνοίς

ἐπ[έεσσι μαθὼν δὲ σαφῶς ὅτι Νέστωρ

5 κείται | πρεσβύτερος μ[ε]τρίων χηρῶν ἐπαρ[ωγ]ός

ἔνθα | δι' ἐν[κ]ρατίης ὁ διάκονος ἐσθλὸς [ύ]πο[σ]τάς

Πεισ | ιδικ ?]ῆς θησαυρὸς ἐπαρχί[η]ς ἐπίλεκτος,

δο[ύ]λος ? | Πανσ ?]ανίου ὁ διδάσκαλος ἡιθίοισιν

καὶ σοφὸς | ἔπλετο πιστός

10 ἡγεμόσιν ξ[] συμπ ?]ᾱσι δὲ μύρια φύλα.

καὶ μνησθεὶς φιλότητος ἐμῆς | κεδν ?]ῆς σοφίης τε

ἐ[μ]οὶ στενάχων Ἀ[ιδ]ος [] ν πάλι χαί[ρ]ων

ἡμετέρης φιλίης [μ]εμνημένος | ἀπα πάντα

τὴν σεμνὴν φιλάδελφον [] οπ[] τὴν

15 ἡ[δ] ἐφί[λ]ην Μαμμεῖν []

]ην ἐνκρατίης οἰκονόμον |
 μ[νῆ]μης χάριν ὁ[ς] ρ]ος ἐν ὕμνοις
 τεῆς or τ[ρ]ησεν
 μνῆ]ματα καλλιᾷσουσι καὶ ἐσσομέν[οισι πνθέσθαι ?]

The epitaph opens with an apostrophe to the passer-by: this is an archaic fashion, and would not be likely to persist after the fourth century. In the note on line 7 it is shown that the probable restoration implies a date earlier than 372.

Then follows a description of the deceased, who was a priest in the land of Isaura, a presbyter, helper of poor widows, having also been deacon, select treasurer of the Pisidian Province, teacher to the youth, wise, etc. His dear wife, well-remembered, survived him: her name was Mammeis, a name of the earlier type.⁷ Some others united with her to make a beautiful tomb for posterity to ask about. One of these others became an οἰκονόμος for the same reason as Nestor was made a deacon, on account of his self-restraint and continence.

1. A metrical variation of the prose formula, ἐλπὶς τοῖς παροδείταις χαίρειν, or χαίρειν τοῖς παροδείταις or παριοῦσιν. The length of the gap between the two parts of this line is uncertain: according to my copy there appear to be only one or two letters lost; but a fresh copy, more careful than my first hasty, unrevised, and merely provisional copy, is much needed. In the circumstances I could not easily estimate the gaps.

1.—This is the first line at the top of the stone, separated from the rest by moulding.

2. [ι]έρευν is a probable restoration. The terms ἱερεύς and ἀρχιερεύς were used by the Lycaonian Christians in such a way as to imply that the distinction between clergy and laity was familiar when this class of inscriptions was engraved (probably the fourth century). On ἀρχιερεύς in Lycaonian Christian usage, see the writer's note in *Oesterr. Jahreshefte*, 1898, *Beiblatt*, p. 95. ἱερεύς and ἱερεύειν as Christian occur often, see *Ath. Mitth.* 1888, p. 236, No. 7 (where I failed to perceive that the description of the father as simply ἱερεύς must be taken as showing that he was a Christian priest), Cronin in *J.H.S.* 1902, p. 362.

4.—The inscription seems to have begun by giving a line to each hexameter (as in No. 1); but soon it was found that some lines were not filled by the hexameter; and the word κείται from the fifth hexameter seems to have been added at the end of 4. The Λ after Νέστωρ is probably falsely copied: it should be only /, the symbol marking the end of the hexameter (as in lines 11, 13). This is one of the faults which would certainly have been corrected, if revision of the rough copy had been possible.

5.—The correction ἐπαρ[ωγ]ός seems certain. The copy shows τ

⁷ *J.H.S.* 1904, p. 290 f.

crowded against the preceding Γ in such a way as to make Γ probable. Thus the line is a mere metrical variant of the prose expression in No. 40; and it may be regarded as almost certain that the prose formula is older, and that the metrical form took its origin shortly after (just as the epitaph of Avircius Marcellus of Hieropolis Phrygiae was within a few years imitated by Alexander⁸). Probably No. 40 and No. 41 belong to the same half century, and were engraved on the graves of two presbyters of the church of Isaura Nova. The name Νέστωρ is too short for the gap in No. 40, line 2; and a different name containing 8 to 10 letters is needed there.

6.—[ἐγ]κρατής for ἐγκρατείας is probably to be read here, as in line 15. In the fourth century the word has probably no reference to the Enkratite heresy; nor has it any extreme sense, as Nestor was evidently married. In an inscription of Laodiceia Katakekaumene, a certain Orestina is described as ἐνκρατευσαμένη,⁹ which term there must be much the same as παρθένος in several Lycaonian Christian inscriptions.

7.—The name of the Eparchia is unfortunately lost. The word must have been either Λυκαονικήs (an improbable form), or Ἰσαυρικήs, or Πεισιδικήs, or Γαλατικήs. The first two are excluded by metrical reasons, as the village poet who composed this epitaph seems to have a better idea of metre (his worst fault is οἰκονόμον l. 15, which must be scanned either $\cup \cup _ _$ or more probably $_ _ \cup \cup$). The last is excluded by the date: Isaura Nova cannot have belonged to Prov. Galatia later than 297, if so long as that.¹⁰ In all probability it was in the Tres Eparchiae from the second century onwards. There remains only Πισιδικήs, which might here quite reasonably be scanned as a choriambus for metrical convenience. Now Pisidia Provincia included Iconium and Lystra from c. 297 to c. 372 A.D.; and though we should hardly have expected Dorla to be included in that province, yet this restoration if correct would prove that it was, and the connexion is quite possible. Hence probably this epitaph was composed before 372, while it certainly cannot be much older than that date.

10.—ξ[είνοισ τε] seems unsuitable.

19.—The final tag is common in such epitaphs of Central Asia Minor.

42.—Dorla. R. 1901.

ΜΑΜΑΣΚΕΔΗΜΗΤΡΙΟΣΕΚΟΣ
ΜΗCΑΝCΑΔΑΝΤΟΝΠΡΕCΒΥ
ΤΕΡΟΝ

Μαμᾶς καὶ Δημήτριος ἐκόσ-
μησαν Σαδᾶν τὸν πρεσβύτερον

⁸ C.D. ii. p. 720 ff.

⁹ Ath. Mitth. xiii. 1888, p. 272. Prof. Sterrett wrongly assigns it to Konia (*Epigraph Journey*, No. 217). He did not see the stone. I copied it in Ladik in 1882. Sterrett's No. 217 and No. 216 are engraved side by side on one stone: he has been misled by the bad copy

of Dr. Saba Diamantides into the false form Orestis instead of Orestine.

¹⁰ Isaura Palaia was included in the Tres Eparchiae from c. 137 onwards. Iconium and probably Lystra were in Prov. Galatia until about 297; but probably Isaura Nova went with Derbe and Isaura Palaia in the Tres Eparchiae.

43.—Euren near Dinek. R. 1901.

| | |
|--------------------------|------------------------------|
| ΔΟΜΝΟCΟΜΟΛΟΓΗΤΗCΕΚΟC | Δόμνος όμολογητής έκόσ- |
| ΜΗCΕΝCΕΡΕΙΛΙΟΝΤΟΝΑΗΕΛΦΟΝ | μησεν Σερείλιον τόν άδελφόν. |

The letters are late in style: the inscription cannot be earlier than the fifth century. Dinek seems to have been a village of the territory of Nova Isaura.

44.—Dinek. R. 1901. Fountain. Late letters, rude and faint.¹

| | |
|-----------------------|--------------------------------|
| ΝΕΟΠΤΟΛΕΜΟCΙΕ//// | Νεοπτόλεμος ίε[ρεύς Βάν? τήν |
| ΓΥΝΑΙΚΑΚΑΙΟΥΡΤΑΝΧ//// | γυναίκα καί Ούρ τ[ή]ν [μητέρα? |
| Relief: horseman. | |
| ΑΚΚΑΝΤΗΝΕ | κ[ε] ?] *Ακκαν τήν έ[αυτοῦ |

The term *ιερεύς* here may denote a Christian priest; the inscription is probably too late for a pagan priest to mention his office. On *ιερεύς* in Christian inscriptions of Lycaonia, cf. Mr. Cronin in *J.H.S.* 1902, p. 362.

45.—Alkaran. R. 1901, 1904. On round cippus in cemetery north-west of the village.

| | |
|--------------|------------------|
| ΜΝΗΜΗCΧΑΡΙΝ | μνήμης χάριν |
| ΚΟΝΩΝΟC | Κόνωνος |
| ////////ΙCΤΑ | [προ]ιστα[μένου] |

μνήμης χάριν seems to be here a translation of *in memoriam* at the beginning of Latin epigraphs and not used after the fashion of the usual Greek formula which comes always at the end of the epitaph. Konon is one of the official *Proïstamenoι* whom Basil, *Epist.* 190, advised Amphilochius to appoint in the small towns dependent on Isaura Palaia, before a new bishop was appointed in that city.¹¹ It is not improbable that Konon may have been appointed by Amphilochius in the village or town whose remains are seen on the left of the road to Baltcha-Assar-Keupreu, near the bridge. This dating would suit the lettering, which is midway in style between the usual Isauran forms and the late letters of No. 43 or 44.

46.—Dorla. In the mosque. R. 1904.

| | |
|----------------------|--------------------------------|
| ΑΥΔΙΑΕΚΟCΜΗCΕΝΑΙΙΘΑΛ | Κ]λανδία έκόσμησεν Α[ύρ.] Θαλ- |
| ΑΙΝΤΟΝΑΝΔΡΑΥΤΗCΟΙΚΟ | .]αίν τόν άνδρα αύτης οίκο- |
| ΟΜΟΝΕΤΕΙΜΟΝΜΝΗΜΗC | ν]όμον έντειμον μνήμης |
| ΧΑΡΙΝ | χάριν |

If the restoration *Αύρ.* is right (as seems highly probable), the epitaph can hardly be later than the fourth century, and might very well belong to the third.

¹¹ See *Oest. Jahresh.* 1904, *Beib.* p. 77 ff.

47.—Dorla. R. 1904. Ναῆς ἐκόσμη[σε]ν Εἰούλιον. Underneath is an incised garland. The first name may possibly have lost some letters at the beginning (*e.g.* [Ἀθη]ναίης); but this is improbable. Naês (*i.e.*, Nais) would be a Hellenized form of the native name Nas or Enas, see *Cit. and Bish.* i. p. 269, No. 91.

48.—Dorla. R. 1904. Two miles south-east from the village. Νάννα Ναλήμιος. Underneath is ornament, pair of rosettes between columns, no pediment above the columns.

49.—Dorla. In western cemetery: R. 1904. Complete on right, and top.

| | |
|----------------|----------------------------|
| ////\ΛΗΡΟ | ὁ κ]ληρο- |
| ////ΥΤΟΥΑ | νόμος α]ὐτοῦ Ἀ- |
| ////ΕΝΤΟΛΗΝ | μᾶς κατ'] ἐντολὴν |
| ////\ΥΤΟ////ΤΥ | αὐτο]ῦ τὸ[ν] τυ[μβον μ. χ. |

50.—Dorla. R. 1904. [ἡ δεῖνα ἐκόσμησεν τὸν ἄν]δρα α[ὐτ]ῆς Λον-
γείνον [μ.] χ.

51.—Dorla. R. 1904. Αὐ[ρ]η[λία ?] ἐκόσμησεν τὸ[ν] ἀδελφὸν Νέσ-
τορα.

52.—Dorla. R. 1904. Αὐρ. Δ[ν]σινόη ἡ καὶ Ματρῶνα Φλ. Σεισαμόου
γυνή.

The name Flavius, abbreviated like a praenomen, is characteristic rather of the age of Constantine than of the Flavian dynasty 69–96 A.D.

53.—Dorla. R. 1904. Τυλλία Δάδα Μακρί[ν]ου θυγάτηρ μ. χ. Swas-
tika under the inscription.

54.—Dorla: Stele in the mosque wall: H. 1890.

| | |
|--------------------|---------------------------|
| ΦΑΝΑΛΣΕΚΟCΜΗCΕΝΤΟΝ | Φαν[α]λ[ι]ς ἐκόσμησεν τὸν |
| ΑΔΕΛΦΟΝΤ//ΑΜΟΝ | ἀδελφὸν Τ[ι]αμον |

Φαναλῖς seems to be a Grecized form of Οὐαναλῖς or Βαναλῖς, No. 69, a common Isaurian name.

55.—Dorla. R. 1901.

Γ ΑΙ ΙΟΥΛ ΟCΟΥΑΛΗCΕΚΟCΜΗCΕ
ΙΟΥΛΙΑΛΟΝΓΙΝΙΑΤΗΝΑΔΕΛΦΗΝΑΥΤΟΥ

. Γαι. Ἰούλ[ι]ος Οὐάλης ἐκόσμησε
Ἰουλία Λονγινία τὴν ἀδελφὴν αὐτοῦ.

Valens is a name which might spread either from imperial dynastic reasons in the second half of the fourth century or from non-dynastic causes

as a common Roman name with military associations at any time. C. Julius might be in use at an early and a late time. In the fourth century the name Julius revived in use owing to dynastic causes. The whole name C. Julius Valens is more likely to be of the late fourth century style. His daughter Julia Longinia is put ungrammatically in the nominative (cf. No. 56).

56.—Dorla. R. 1901, 1904.

| | |
|-----------------------------|----------------------------|
| ////ΟΝΓΕΙΝΟΣΧΑΛΚΕΥΣ ΜΙΗ//// | Λ]ονγείνος χαλκεὺς μ[νήμης |
| ΠΑΣΙΦΙΛΟΝ Λ | πάσι φίλον. [χ]ά[ριν] |

No letters seem to have been lost at the beginning of line 2. Probably we should read *πάσι φίλον*, an awkward epithet of the buried person (compare the false construction in No. 55) rather than *Πασίφιλον* as the name of the buried person. The extremely rude indication by incised lines of a smith holding tongs over an anvil was evidently cut after death as an indication of the occupation of the deceased. On the other hand the more elaborate and skilful ornamentation of most of the tombstones was done by trained artisans in the shop, before the stone was sold. The simple nominative of the deceased's name occurs also in Nos. 63, 65, 66, etc. The words at the end of the lines were added as an afterthought by a different hand, and were apparently never completed.

57.—Dorla. R. 1901.

| | |
|--------------------|----------------------|
| ΠΑΠΙΑΣΕΚΟCΜΗCΕΝΤΗΝ | Παπίας ἐκόσμησεν τήν |
| ΠΙΝΑΤΡΑΝ | πίνατραν. |

πίνατρα was probably a native word, indicating some relationship, like the obscure *πάτρα* (perhaps father's sister), often used in Phrygian inscriptions, *C.B.* ii. p. 394.

58.—Dorla. R. 1904. Large stone beside No. 2, perhaps belonging to the same heroön (but more probably part of a neighbouring grave): broken right and left.

| | |
|--------------|---------------------|
| ΠΑΠΑCΘΑCCK | Παπᾶς Ὁᾶς Σκ[|
| ΤΟΥΤΩΝΤΗΝΑΔΕ | τούτων τήν ἀδε[λφήν |
| Ϛ ΧΑ | μν.] χά. |

The rare word in inscriptions *ἀδελφότης* might also be restored in l. 2. It occurs also in a fourth century Phrygian Christian inscription, published in *C.B.* ii. p. 720. Ὁᾶς is a variant of Βᾶς.

There seems to be a list of names, which does not suit the restoration *ἀδελφήν* very well. Possibly, in l. 1 ε]κ[όσμησεν should be restored (instead of Σκ as beginning of a personal name).

59.—Dorla. R. 1904. On fragment of entablature, broken right and left: letters small, crowded, and worn.

ΟΙ ΛΟΝΙΑ ΨΗΝΡΕΚΛΑΝΑΝΟΪΗΚΑΝ
ΛΚΑΙΑΝ ΙΑΝΗ ΚΑΛΑΝΟΥΓΓΑΤΕΡΑΤΟΥΤΕΓΟΥΛΑ

This inscription was engraved on the heroön of Rekla. In line 1 the end is . . .]ην Ῥέκλαν ἀν[έστ]ησαν. In l. 2 another set of persons, probably, did honour to Ῥέ]κλ[α]ν θυγατέρα τοῦ Τεγούλα. The lettering of this inscription is different in character from the other inscriptions of Dorla, and the monument also was of a different form. It probably belongs to the second or even the first century after Christ.

60.—Dinek. R. 1901. In the mosque.

ΤΕ ΝΕΙΤΑΙΑ
ΠΗΡΤΙΣΑΝΤΑ
ΑΜΦΟΤΕΡΑΕΡΓΑ

[οἱ δεῖνες] τε[χ]νεῖται ἀ-
πήρτισαν τὰ
ἀμφότερα ἔργα

This restoration may confidently be preferred to the other possible suggestion that the name may be Τε[ν]νεῖται or Τε[ι]νεῖται (of which Dinek would be a modern form, with κ suffixed to give a Turkish appearance). Artisans trained in stone cutting and carving are mentioned in No. 15, also in the district of Isauria immediately south of Nova Isaura (Sterrett *Wolfe Exped.* pp. 23, 41, 49), and in an unpublished inscription copied by Mr. T. Callander in 1904.

61.—Dorla. R. 1901.

ΜΑΣΟΚΑΕΚΟΣΜΗΣΕ ΝΜΟ Υ////
ΑΚΑΤΟΝΓΑΜΒΡΟΝΑΥ ΤΗΣ

Μασόκα ἐκόσμησεν Μου[ν]ᾶν
- -]ακᾶ τὸν γαμβρὸν αὐτῆς

62.—Dorla. R. 1901.

ΚΑΠΙΤΩΝΕΚΟΣΜΗΣΕ////
NON//////////ΝΑΛΙΝ////

Καπίτων ἐκόσμησ[εν]
Νόν[ναν καὶ Οὐά]ναλίν

63.—Dorla. R. 1901.

ΡΟΔΟΚΛΗΣ
ΗΑΔΕΛΦΗΛΙΑΝΗ////

Ῥοδοκλῆς.
ἡ ἀδελφὴ Λιανῆ? Λιανῆ? [ἐκόσμησεν?

There is no space for the reading [τ]ῇ ἀδελφῇ, so that probably Ροδοκλῆς was the deceased, and his sister made the tomb (or else ἡ ἀδελφὴ is ungrammatically used for accusative, cf. Nos. 55, 56).

64.—Dorla. R. 1901.

////ΚΕΙΤΑΙΜΑΥΡΗΛΙΟΣ
////ΜΝ ΜΗΧΑΡ

ἐνθάδε] κείται Μ. Αὐρήλιος
Ζήνων ?] μν[ή]μη (!) χάρι[εν]

Ζήνων is restored *exempli gratia*. The engraver omitted C after H in 2. The common formula ἐνθάδε κείται (or κατάκειται) seems to have

come into use in the fourth century all over the Greek-speaking provinces. It was probably imitated from the Latin *hic iacet*; and if so spread eastwards from an origin in Italy, or South Gaul, to Asia Minor. It occurs rarely in Nova Isaura (No. 19), and the examples are on other grounds recognizable as among the latest monuments of the place.

65.—Dorla. R. 1901.

////ΗΝΩΝ ΟΥΑΛΕΝΤΟΣ Ζήνων Ουάλεντος.

See No. 55.

66.—Dorla. R. 1901.

////ΜΟΥΑΣ ΜΑΞΙ ////μονας Μάξι[μαν or -μα

The first name may be Τλαμονας or Κιδραμονας or Όπραμονας or Ουανγδαμονας (see Cronin, No. 75) or Ουραμμονας.

67.—Alkaran. R. 1901: border round stone and garland, under inscr.

IN/ //////ΚΟΣΚΑΙΠΑΠΙΑΣ Ίν[δα]κος καὶ Παπίας
ΠΑΤΙ,////ΑΝΣ,////ΓΛΥΚΥΤΑ Πα[πι]αν[φ] γλυκυτά-
ΜΝΗΜΗΣΧΑΦΙΝ τῷ μνήμης χάριν

68.—Dinek-Serai, in the bridge. R. 1901.

ΠΑΠΠΑΣΒΑΣΙΛΙΣΣΗΑΔΕΛ πάππας Βασιλίσση ἀδελ[φῆ]

69.—Dinek-Serai, in the bridge. R. 1901.

ΕΝ ΔΕΙΗ ΎΔΩΡΟΕΝΑΝΘΡΩ
ΠΟΙΣΙΔΙΚΑΙΟΝ Ξ ΖΗΣΑΝΤΑΠΑΠΑΝ
ΚΑΤΕΧΕΙΚΟΛΠΟΙΣΙΛΑΒΟΥΣΑ Ψ ΟΝ
ΟΥΑΝΑΛΙΣΤΕΙΛΗΕΝ Ψ ΕΗ Ψ ΘΥΓΑ
ΤΗΡΓΕΓΟΝΥ,//// Α Ψ ΣΤΗΛΛΗΚΑΙΜΟΥΣΗ
ΚΑΛΗΠΟΘΕΟΥΣΑΘΑΝΟΝΤΑ

ἐν[θά]δε [γ]ῆ [πολ]ύδωρος ἐν ἀνθρώποισι δίκαιον
ζήσαντα Παπᾶν κατέχει κόλποισι λαβοῦσα,
ὃν Οὐαναλὶς τείμησεν, ἐῆ θυγάτηρ γεγονυ[ῖα],
στήλλη καὶ μούση καλῇ, πόθέουσα θανόντα.

70.—Dinek-Serai, in the mosque. R. 1901. Rude letters.

ΑΘΗΝΙΩΝΤΟ Ἀ[θ]ηνίων τ[ῆ]
ΣΥΒΙΒΙΩΜΟΥ συβιβίῳ μου
ΜΝΗΜΗΣΧΑ μνήμης χά-
PIN ριν

συβιβίῳ is either an error of engraver or a local rude pronunciation of *συμβίβω* with β for μ, and a slight vowel separating the two β.

71.—Dinek-Serai, mosque. R. 1901.

| | |
|---------------|------------------|
| ΝΕΣΤΩΡΕΚΟΣΜ | Νέστωρ ἐκόσμη- |
| ΣΕΝΤΗΝΓΛΥΚΥΤΑ | σεν τὴν γλυκυτά- |
| ΤΗΝΜΗΤΕΡΑ | τὴν μητέρα |

The name Nestor is common in this district, Nos. 40, 41.

72.—Alkaran. R. 1904. Rude letters.

| | |
|------------|-------------|
| ΝΑΡΚΙΣΣΩ | Νάρκισσος |
| ΚΛΕΟΝΕΙΚΩ | Κλεονείκω |
| ΓΥΝΑΙΚΑΔΕΛ | γυναικαδέλ- |
| ΦΩΓΛΥΚΥΤΑ | φω γλυκυτά- |
| ΤΩΜΧ | τω μ.χ. |

Terms for relationship are numerous in Asia Minor (cp. No. 57), showing that the family ties were carefully attended to.

73.—Alkaran. R. 1904.

| | |
|------------|--------------|
| ΑΛΓΕΤΗΣΘΕ | Λαγέτης Θε- |
| ΟΔΩΡΑΓΥΝΑΙ | οδώρα γυναι- |
| ΚΙΙΔΙΑΜΝΗ | κὶ ἰδίᾳ μνή- |
| ΛΗΧΧΑΡΙΝ | μης χάριν |

The first two letters are uncertain, and the name may be Ἀλγέτης; but Λαγέτας occurs on coins of Philadelphia (see Head, *B.M.C. Lydia*, p. lxxxvi).

74.—Alkaran. R. 1904.

| | |
|---------|------------|
| ΚΥΡ Σ | Κύρ[ο]ς |
| ΕΚΟΣΛΗ | ἐκόσμη- |
| ΣΕΝΤΟΝ | σεν τὸν |
| ΑΔΕΛΦΟΝ | ἀδελφὸν |
| ΥΤΟΥ | α]ὐτοῦ |
| ΛΙΛΝΟΝ | Ἀ]λι[α]νὸν |
| Λ Χ | μ. χ. |

75.—Alkaran. R. 1904. Complete on right; probably very little, if anything, lost on left: probably no second line.

ΣΕΣΑΠΕΡΝΟΥ

76.—Euren near Dinek. R. 1901. This and the next were on two similar stones of great size.

ΚΛΣΤΩΡΕΚΟCΜΗCΕΝCΑCΙΝ
ΜΝΗΜΗC ΧΑΡΙΝ

Κάστωρ ἐκόσμησεν Σάσιν
μνήμης χάριν

77.—Euren near Dinek. R. 1901. See No. 76.

ΤΑΤΑΕΚΟCΛΗCΕΝΤΟΝΠΑΤΕΡΑΥ Τάτα ἐκόσμησεν τὸν πατέρα (α)ὕ[της]
CACEINΛΗΗΛΗC Σάσειν μνήμης
ϝ Χ ϝ Χ

78.—Dinek. R. 1901. In a fountain.

ΑΥΡ ΙΟΚΟΝΔΑCΑΝΕ///
CΕΤΟΜΓΛΥΚΥΤΑΤΟΝΥ///
ΔΟΜΕΤ ΙΝ
Μ

Αὐρ. [Τρ]οκόνδας ἀνέ[στη-
σε τὸμ γλυκύτατον ὕ[ιὸν
Δομέτιν
μν(ήμης) [χά(ρ)ιν]

τὸμ for τὸν, compare ἀνέστησεμ No. 35.

Δομέτιν = Δομέτιον, a very common contraction.

79.—Dinek. R. 1901.

ΜΑΜΜΗCΕΚΟCΜΗCΕΝΤΑΤΑΝ
ΚΑΙΖΟΗΝΤΗΝΑΔΕΛΦΗΝ

Μάμμης ἐκόσμησεν Τάταν
καὶ Ζοὴν τὴν ἀδελφήν.

80.—Dinek. R. 1901.

ΡΟΥΦΟC///
ΝΟΝΤC///
ΜΝΗΜΗC///
Μ

Ῥοῦφος [ἐκόσμησε Λουγεί-?
νον τὸ]ν υἱόν?
μνήμη]ς χάριν

81.—Baltcha-Assar-Keupreu. R. 1901. The stones in this bridge have no resemblance to those of Dorla; and have evidently been brought from some village of the open plain, perhaps from the ancient site a few minutes south of the bridge. They are quite in the style of the ordinary Lycæonian village inscriptions.

ΝΕCΤΩΡΜΑΝΘ
ΑΜΗΤΡ ΜΧ

Νέcτωρ Μάνθ-
α μητρ[ί] μ. χ.

The letters are very rude and late.

82.—Baltcha-Assar-Keupreu. R. 1901. Letters rude and late.

ΤΑΤΙΕΙCΠΑΥΛΩΑ
ΕΛΦΩΓΛΥΚΥΤΑ
ΤΩΧΑΙΡΕΙΝ

Τατιεῖς Παύλω ἀ[δ-
ελφῶ γλυκυτά-
τῳ χαίρειν

The formula with *χαίρειν* is noteworthy. I do not remember it elsewhere.

83.—Baltcha-Assar-Keupreu. R. 1901.

ΠΑΠΕΙΘΕΙΗ
ΜΗΤΡΙΓΛΥΚΥ
ΑΙΡΕΙΝ

Παπείς Θείη
μητρὶ γλυκυ-
τάτῃ χ]αίρειν

θείη is either the name or an epithet of the mother, equivalent to the 'departed and deified.'

84.—Baltcha-Assar-Keupreu. R. 1901. Contains the same formula, *χαίρειν*, but with the genitive . . . *είης* [θυγα]τρός instead of the dative. This is the best in style and lettering, and the earliest of all the stones on this site.



85.—Baltcha-Assar-Keupreu. R. 1901.

+

ΚΟΝΠ
ΤΑΤΙΞΗ
ΜΝΗΜ

μνήμη

μνήμη usually comes first in these late village stones of Lycaonia.

86.—Baltcha-Assar village. R. 1904.

ΚΑΛΑΤΑΑΝΕΣΤΗ
ΣΕΝΚΥΡΟΝΛΗΛΗC
ΧΑΡΙΝ

Καμάτα ἀνέστη-
σεν Κύρον μνήμης
χάριν.

87.—Baltcha-Assar-Keupreu. R. 1901.

ΙΝΔΑΚΟCΚΑΠΙ
ΠΡΦΟΥCΙΓΛΥ
π τ

"Ινδακος Καπι-
(τ)ρ(έ)φουσι γλυ-
κυτ]ά[τ[οις χαίρειν ?

Either *τωνος* or *τοῖς* was omitted before *τρέφουσι*, as the gap is too small to contain both. Π by apparent slip for τ is certain on the stone, and ε is omitted (unless some other word than *τρέφουσι* is intended). The ρ is extremely rude in shape.

W. M. RAMSAY.

NOTICES OF BOOKS.

Harvard Lectures on Greek Subjects. By S. H. BUTCHER. Pp. viii+266.
London : Macmillan & Co., 1904. 7s. net.

The six lectures of which this volume is composed fall into three groups : two lectures in which the spirit of Greece is contrasted with the contemporary but diverse spirits of Israel and Phœnicia, two which treat of the character of Greek literature under the headings of 'The Greek Love of Knowledge' and 'Art and Inspiration in Greek Poetry,' and two which describe Greek literary criticism in the spheres of verse and prose. The treatment may seem at times rather desultory, and no theories of special novelty are advanced ; but the merit of the volume lies in its interpretation of the Greek spirit by one who has very few living equals in his appreciation of it. It is good both for those who are but slightly acquainted with Greek culture and for those who are immersed in the details of it to go back from time to time to the consideration of the spirit which informs it and which makes it valuable (or rather invaluable) to our modern world ; and there are few better volumes than this for such a purpose.

The Speeches of Isæus, with critical and explanatory notes. By W. WYSE. Pp. lxiv+735. Cambridge : University Press, 1904. 18s. net.

This edition of Isæus, which has been long in preparation, is on a very complete scale. It contains a critical introduction (pp. i-lxiv), text with Latin critical notes (pp. 1-174), commentary (pp. 175-723), and indices (pp. 725-735). The introduction includes an elaborate study of the Burney MS. (Codex Crippsianus), which is the main authority for the text of Isæus. Mr. Wyse has made a special study of Athenian law, and his commentary will be one of the leading authorities on this subject for a long time to come. Its use for this purpose, independently of its use as a commentary upon Isæus, is facilitated by the index of subjects. Mr. Wyse, it may be observed, does not accept every word of Isæus as an incontrovertible authority on legal questions. He recognises, what is often forgotten, that Isæus was an advocate, not the author of a treatise on common law ; and his duty to his client must not infrequently have required him to disguise or misrepresent the true interpretation of the law. His statements must consequently be accepted cautiously, as *ex parte* statements, and with due consideration of the circumstances under which they were made.

Greek Thinkers : a History of Ancient Philosophy. By THEODOR GOMPERZ.
Vols. ii and iii. Translated by G. G. BERRY. Pp. xii+397, vii+386. London :
John Murray, 1905. 14s. net each vol.

The second and third volumes of Prof. Gomperz's great work, which are now made available in English, deal solely with Socrates, the early Socratics, and Plato. After two intro-

ductory chapters, the life, teaching, and death of Socrates occupy pp. 45-118 of vol. ii. Successive chapters (pp. 119-245) deal with Xenophon, the Cynics, the Megarians (including the Elian and Eretrian schools) and the Cyrenaics. Plato occupies the rest of the volume and 272 pages of the third, the rest of which contains notes and an index to both volumes.

In regard to the chronology of the dialogues, Prof. Gomperz adopts the conclusions arrived at long ago on linguistic and stylistic grounds by Campbell—conclusions which had been wholly ignored both in England and on the continent until they were discovered and endorsed a few years ago by Gomperz himself and Lutoslawski. Each dialogue is described and discussed at length; and this part of the work will be of great value to Platonic students in England. Indeed the same may be said of it as a whole. Those who make a special study of Greek philosophy will of course be bound to make themselves acquainted with it; but, written as it is in good literary style, with profound knowledge of the subject, and with a wide outlook over modern, as well as ancient, philosophy and history, it is admirably qualified to take the place for younger students of the subject which Mommsen does in the sphere of Roman history. Prof. Gomperz's acquaintance with English literature and thought, which appears in many allusions and comparisons throughout the work, will aid in commending it to English readers. The translation is sound and competent, and it is only comparatively seldom that the fact that it is a translation forces itself on the reader's notice.

Demetrius on Style: the Greek text of Demetrius *de Elocutione*. Edited after the Paris manuscript, with introduction, translation, facsimiles, etc. By W. RHYS ROBERTS, Litt.D. Pp. xiii+328. 2 Plates. Cambridge: University Press, 1902.

Dr. Rhys Roberts has completed his trilogy of editions of the masterpieces (Aristotle excepted) of Greek literary criticism by an elaborate edition of the *De Elocutione*, on the same lines as his previous works on Longinus and Dionysius. The Introduction, dealing with the study of prose style among the Greeks, is rather sketchy; and the discussion of the authorship of the treatise, while stating fairly the various identifications that have been proposed, goes no further than concluding that the author was not Demetrius Phalereus, but another person with the same first name, who lived in the first century A.D., or possibly the first century B.C. The text is based on a new collation of the Paris MS. (Bibl. Nat. 1741, of the tenth or eleventh century), of which two specimen facsimiles are given. The commentary (pp. 212-262) is followed by a glossary of technical terms (pp. 263-309) a bibliography and indices.

Didymes—Fouilles de 1895 et 1896. Par E. PONTREMOLI and B. HAUSSOULLIER. Pp. viii.+212, 20 plates, 62 cuts in text. Paris: Ernest Leroux, 1903.

This handsome volume brings our knowledge of the temple at Didyma up to date, but cannot be reckoned as a final publication, while so much of the temple still remains buried beneath the tower crowned by the windmill and beneath various houses. In the introduction, the authors do full justice to earlier travellers and excavators, both English and French. In the first book is a description of the temple as laid bare by excavation, especially of the east or principal façade, the clearing of which was the chief result of the recent excavations. The second book gives the history of the various periods of construction, from its beginning in 332 B.C.: it is based upon a series of inscriptions which give exceptionally full information upon the matter. The ornate and exquisitely carved bases of the east front seem not to have been placed *in situ* until the middle of the second century B.C., a date which is, however, more or less conjectural, and which may perhaps appear improbable to some architects, considering the quality of the work. The

capitals with their carved heads, showing, as the authors suggest, Pergamene influence, fit in well with such a date for the completion of this part. The third book deals with the architectural and artistic character of the temple, and its place in the development of Ionic architecture. The authors see in it the influence of Ephesus and of the Mausoleum, and trace its influence on later temples. The fourth book deals with miscellaneous fragments of sculpture and architecture, including some archaic pieces of considerable interest. The whole is illustrated with admirable photographs, which help the reader to realise the beauty and the magnificence of the temple, especially of the richly decorated column bases of its eastern face.

Burlington Fine Arts Club. Exhibition of Ancient Greek Art. Pp. xxxii + 265. 112 plates. London: printed for the Burlington Fine Arts Club. 1904. [To Subscribers £4 4s.]

This work is a sumptuous reissue of the catalogue of the noted Exhibition of ancient Greek Art, which was held at the Burlington Fine Arts Club in the summer of 1903. The catalogue was in the main the work of Mrs. S. A. Strong, though special sections were contributed by Mr. G. F. Hill (select coins), Mr. Arthur Evans (gems in his own collection), Mr. C. Newton Robinson (gems), Mr. H. Wallis (objects in glass), and Prof. Furtwaengler (gems). It has been revised, and supplemented with addenda, and re-issued with ample margins in folio form, in order that the plates might be of sufficient size. Certain groups of objects remain unillustrated for various reasons, but the great majority of the works in the exhibition are here published with photogravure or colotype plates.

Das Relief des Archelaos von Priene. By C. WATZINGER. Pp. 25. Two plates and nine illustrations. [63rd Berlin Winckelmannsprogramm.] Berlin: Reimer. 1903. 5 m.

An examination of the types of the Muses on the relief of the Apotheosis of Homer. After a suggestion, by Amelung, they are assigned to Philiscus of Rhodes, and are compared with the corresponding types in statuary, and also more particularly with the figures on the base from Halicarnassos, in the British Museum. The artist, Archelaos of Priene is assigned to the Rhodian school, and the mountain on the relief is the Atabyrion of Rhodes. The date of the work is about 210 B.C., for Ptolemy Philopator and Arsinoë are represented as Chronos and Oikoumene, and their married life lay between 217 and 205 B.C. The relief was dedicated by the poet, whose statue and agonistic tripod are seen in the middle tier. He was either Apollonius of Rhodes, or some poet of his school.

Essai sur l'Art et l'Industrie de l'Espagne Primitive. By PIERRE PARIS, 2 vols. Pp. xv + 357 + 327. 23 plates, and 787 illustrations in text. Paris: Leroux, 1903.

The author has attempted to give a connected view of the scattered and inaccessible materials on which an estimate of the art of the Iberians must be based. In each branch of art he shows that a few objects have been simply imported from Greece, and the East of the Mediterranean. More frequently the objects found are native productions. Some are frankly barbarian and indigenous, but many give clear indications that the influence of Greece and the East was felt by the Iberian craftsmen. These influences can be traced from the Mycenaean period onwards to Roman times. Considerable space is devoted to a discussion of the sculptures of Cerro de los Santos, where the question is made more complex by the presence of many recent forgeries. The famous bust of 'the Lady of Elche'

is shown to be less isolated than it first appeared to be, and is assigned to an Iberian artist, with Greek training, and is dated about 440 B.C.

Histoire de l'Art dans l'Antiquité. By G. PERROT and CH. CHIEPIEZ. Tome viii. La Grèce Archaique. La Sculpture. By G. PERROT. Pp. xv+756. 14 plates and 363 illustrations. Paris : Hachette, 1903. 30 f.

The volume opens with an etched portrait of Prof. Perrot, and a memoir of M. Chipiez, whose long collaboration has been terminated by death. It deals in the first instance with civil, military, and sepulchral architecture, that of the early temple having been already discussed in vol. vii. The greater part of the book is devoted to the rise of Greek sculpture in the archaic period, which is interpreted as the interval between the 1st Olympiad and the Battle of Salamis. A discussion of the general conditions of early sculpture is followed by chapters on the Ionian schools of Asia Minor and the islands; the Dorian schools of the Peloponnesus, Sicily, Magna Graecia, and central Greece; and on the early school of Attica, principally as revealed by the excavations on the Athenian Acropolis.

British Museum. Catalogue of Sculpture in the Department of Greek and Roman Antiquities. Vol. III. By A. H. SMITH. Pp. xii+481. 29 (half tone) plates and 76 illustrations in Text. London : Trustees of the British Museum, 1904. 7s. 6d.

This is the last volume of the Catalogue of Greek and Roman Sculptures in the British Museum. Vol. I having been devoted to the earlier periods, and Vol. II to the principal campaigns of excavation by which the collection has been enriched, Vol. III deals with the residue. These are for the most part of the later Greek and Graeco-Roman schools. They are grouped as statues and busts arranged by their subjects; uncertain ideal heads; portraits, Greek and Roman; torsos, fragments, animals; later Greek and Graeco-Roman reliefs, votive, decorative, and sepulchral; decorative and architectural objects, such as altars, vases, candelabra, and the like. Modern forgeries and casts are briefly described. Comparative tables for tracing objects from the older official publications and a general index to the three volumes complete the work.

Répertoire de la Statuaire Grecque et Romaine. Tome III. 2640 statues antiques. By SALOMON REINACH. Pp. xv+371. 2640 illustrations in the text. Paris : Leroux, 1904. 5 f.

This volume completes, for the present, M. Reinach's 'Répertoire.' He has now supplied, at a nominal cost, a visual index to some 13,645 works of sculpture. The illustrations are rough, but they are in most cases sufficient to determine whether there is need for further reference. The book is valuable (1) as an index of sculptural types, (2) as a guide to the standard publications of objects, (3) as a clue (by means of a special index) to the literature dealing with particular collections.

A Companion to Greek Studies. By LEONARD WHIBLEY, M.A. Edited for the Syndics of the University Press. 8vo. Pp. xxx+672. With 141 illustrations and five maps. Cambridge : at the University Press, 1905. 18s.

The scheme of this work entails eight main headings, distributed as follows :—I. Geography, Fauna, and Flora. II. History and Chronology. III. Literature, Philosophy, and

Science. IV. Art, subdivided into Architecture ; Prehistoric Archaeology and Sculpture ; Painting ; Vases and Terracottas ; Gems ; Music. V. Mythology and Religion. VI. Public Antiquities, including Constitutions and Law, Finance, Slavery, Money, Ships, etc. VII. Private Antiquities : Daily life, Food, Amusements, etc., Houses, Dress, Books, Education. VIII. Criticism and Interpretation, including Palaeography, Metre, and History of Scholarship. Sir Richard Jebb contributes the Literature section, Dr. Jackson the Philosophy, Drs. Sandys, Verrall, and others, Section VIII, and the Art section is shared by Profs. Waldstein, E. Gardner, Ridgeway, and Messrs. Earp and A. H. Smith. Other scholars of equal repute, not exclusively Cantabs, contribute to the sections for which their special knowledge has fitted them. Admitting the natural preference for Cambridge men, there is little fault to be found with the names selected. Indices of Greek names, words, and phrases, and of modern writers and scholars complete the volume, and select bibliographies are appended to each section. On the whole, it is a well-meant but somewhat ambitious attempt to supply the needs of candidates for the Classical Tripos, Part I ; but some of the sections are so dry and meagre as to be almost unreadable.

In selecting a few small points for criticism we shall confine ourselves almost entirely to Section IV. Here after a few preliminary pages on pre-historic Greece, Dr. Waldstein gives in 35 pages a fairly adequate summary of the history of Greek sculpture, although the recent discoveries in Crete are hardly adequately dealt with. His chronology is sometimes a little puzzling, as for instance on p. 229 where the Geometrical period is dated 1100–900 B.C., whereas on p. 233 it is said to last down to the seventh century ; also the period of Oriental influence surely lasts later than 900–750 B.C. The results from Crete make it at least doubtful that the Argolid is the original home of Mycenaean art, and they also furnish a more notable instance of evidence for early dating than the results from the Heraeum (p. 229). The temple at Aegina we now know to be dedicated to Artemis Aphaia, not Athena (p. 241).

Mr. Earp gives a fairly interesting account of that unsatisfactory subject, Greek painting, and Mr. A. H. Smith is sound and intelligible on the subject of vases. But how can terracottas be treated of in one page ? They had better have been omitted ; or at all events a photograph of some typical Tanagra figures substituted for the Tarentine mould of Fig. 41. We do not think that the spelling *cyliz* is in accordance with the Hellenic Society's rules, as claimed in the Preface ; and the specimens of vases selected for illustration are poor and unrepresentative, although something is to be said for choosing specimens from the Fitzwilliam Museum. In Section VI the article on Coins is also very inadequately illustrated by the line-blocks, and Prof. Gardner's monograph on *Types of Greek Coins* should have been added to the bibliography.

Griechische Geschichte. Von JULIUS BELOCH. Dritter Band. Die Griechische Weltherrschaft. Zweite Abteilung. Mit sechs Karten. Pp. xvi+576. Strassburg : K. J. Trübner, 1904. 10 m. 50.

With this volume Dr. Beloch, for the time being, brings his Greek History to a conclusion. He observes, it is true, that something still remains to be done—to trace the course of events which transformed the Hellenes into Byzantines. But we gather that the fulfilment of this task is likely to be long postponed. The present volume does not aim at giving a connected narrative of events. It is intended to supplement the First Part of the Third Volume by a detailed discussion of several questions of difficulty and importance. These include the sources for the history of the period and the modern literature connected with it, the various calendars—Macedonian, Babylonian, and Egyptian—and several chronological points, particularly those relating to the numerous royal houses. Of the other sections the most interesting is that devoted to the principal literary figures of the period and to the leaders of the different schools of philosophy. The volume is, perhaps necessarily, somewhat polemical in tone, but it gives evidence of a most thorough

and independent criticism of all sources of information. A very pleasing feature of the work is furnished by the historical maps. The aid of colours is here employed to depict the extent, at the most important epochs, of the ever-shifting boundaries of the various kingdoms.

The Early History of India from 600 B.C. to the Muhammiadan Conquest, including the invasion of Alexander the Great. By VINCENT A. SMITH. Pp. 389, with nine photographic plates and six maps and plans. Oxford: Clarendon Press, 1904.

Only that part of this work which touches upon Greek History calls for notice in this place. The Indian campaign of Alexander is examined from the standpoint of a historian of India, who views it as a passing episode in the long course of Indian history. The judgment pronounced by him is that there is no trace of any permanent influence left by Alexander's invasion upon the development of India. The greater part of the section devoted to the invasion is, as might be expected, occupied by the discussion of the numerous topographical difficulties. It must be confessed that the succession of sesquipedalian Indian names is somewhat bewildering to the average reader; but those who desire to follow as accurately as possible the romantic march of Alexander will find all the available evidence carefully collected. In particular, the results of modern geographical research are fully utilized. The later Greek invasions of India by Antiochos the Great, Demetrios, Eukratides, and Menander, seem to have left just as little permanent effect upon the civilization of India as did that of Alexander.

Die Inschriften von Sicilien u. Abu-Simbel. Bearb. von O. HOFFMAN. [H. Collitz u. F. Bechtel. Sammlung der Griechischen Dialekt-Inschriften. III Bd. 2 Hälfte, 4 Heft.] Pp. 223-289. Göttingen: Vandenhoeck u. Ruprecht, 1904.

This part of the *G.D.I.* contains some 73 inscriptions from Sicily as well as the graffiti from Abu-Simbel. As a certain number of the inscriptions from Sicily have already been published in earlier parts under the mother-cities, this collection is not properly representative of the epigraphy of the island, even from the dialectic point of view. Thus under Selinus we have only one inscription, and that not the famous one from the ruins of the Temple of Apollo, with a dedication to various deities (*G.D.I.* 3046); Syracuse provides three, among which we do not find the helmet dedicated by Hiero at Olympia (*G.D.I.* 3228). The disadvantage of this arrangement, in view of the scantiness of our knowledge of Sicilian dialects, is acknowledged by the editor; but he has done his best to remedy this defect by cross-references. For the coin-legends he has as a rule been content to refer to Holm.

Recueil des Inscriptions Juridiques Grecques. By R. DARESTE, B. HAUSSOULIER, TH. REINACH. Pp. iii+179-389. 2^e Série. Fasc. II and III. Paris: Leroux, 1904.

The present part completes the second series of this invaluable collection. It contains, among other documents, the regulations of the Delphic phratry of the Labyadae, the statutes of the Athenian phratry of the Demotionidae, certain Cretan texts (including the Gortynian decree on the circulation of bronze money), the Mytilenaeen decree relating to the return of exiles, a long series of acts of enfranchisement, and the list from Dyme of persons condemned to death for sacrilege and forgery. The laws from Olympia are omitted because of the difficulties presented by the interpretation of the Elean dialect. It is to be hoped that this is not the last of the series, and that the editors will see their way to publishing supplements from time to time. A fuller index would have much increased the usefulness of the work.

Les Monnaies Antiques de l'Italie. Par A. SAMBON. Tome I. Fasc. 3 (*Campanie*). Pp. 126. With 115 Cuts in the Text, and a Photographic Plate. Paris: Bureaux du 'Musée.' 1904. 6 f.

We have again to commend warmly the regularity with which the instalments of M. Sambon's work are appearing. This section covers the last portion of the coins of Cumae as well as the whole of those of Naples. The Neapolitan series is interesting, and its richness will be realised if we mention that Sambon enumerates about 450 distinct varieties. Attention is drawn to the evidence of growing Samnite influence as indicated by the inscriptions and the style of the coins, and conclusions as to the political vicissitudes of the city generally are drawn from varieties in the types. A strenuous endeavour is made to secure precision in the chronological attribution of the various series. The main feature of novelty in Sambon's arrangement is that the pieces with the head of Athena are regarded not as earlier than, but as contemporaneous with, those which have the head of a nymph as type. It is not easy to judge from the woodcuts and process-blocks how far that contention can be made good. A more liberal supply of proper photographic illustrations would have been helpful in this respect. But the views expressed on general points continue to be, as a rule, sane and cautious.

Recueil Général des Monnaies Grecques d'Asie Mineure. Commencé par feu W. H. WADDINGTON. Continué et complété par E. BABELON et TH. REINACH. Tome Premier. Premier Fascicule. Pp. 210. 4to. With 28 Photographic Plates. Paris: E. Leroux, 1904. 40 f.

When Waddington died, the widespread regret occasioned by the loss that Greek archaeology had sustained was intensified by the knowledge that what he had meant to be the crowning work of his life was still unfinished. For many years he had been collecting materials for a complete *corpus* of the coins of Asia Minor, an undertaking for which he was equipped in an almost unique fashion. After his death his splendid cabinet passed into the possession of the French nation, while his widow handed over the whole of his voluminous notes to the Académie des Inscriptions et Belles-Lettres. Under the auspices of that learned body his great book is to be completed, the task of editing having been entrusted to the two most distinguished of living French numismatists. MM. Babelon and Reinach evidently realise to the full the seriousness of the responsibility which this pious duty entails. At least three years of labour have been bestowed on the opening section.

There is no introduction and no formal preface. These are reserved for the conclusion of the first volume. It is, therefore, impossible to be certain how far the general lines were laid down by Waddington, and how far they may have been modified by the editors. But it is noticeable that in some important respects they differ from the plan followed in the only instalment of the Berlin *corpus* of Greek coins that has yet been published. There is no attempt made to give an exhaustive list of known specimens. Nor is there much reference to different dies. Indeed, the underlying idea of the whole rather precludes such laborious thoroughness of method. The object kept in view has been to recover, as it were, the archetype of each distinct issue. This must have frequently involved the careful comparison of many individual coins. The professional numismatist cannot but regret that the traces of the preliminary work have been so completely obliterated. But it must be frankly admitted that there is a gain in clearness and simplicity of statement which will be welcome to the general student. The list of pieces struck at each mint is headed by a succinct note, embodying the results of the most recent geographical and historical research. Much pains has been bestowed on the chronological arrangement, and on such details as the precise forms of the monograms that occur. More information as to the exact way in which the letters of the inscriptions are placed upon the coins would sometimes have been useful. And the absence of any indication of the weight of the bronze pieces

is a really serious defect. It is earnestly to be hoped that, before the next section is issued, the editors will reconsider this part of their policy. A special word of praise is claimed by the plates, which are exceedingly well executed. The coins have been admirably selected, and the gallery of types they present is calculated to furnish material for fruitful study. The portraits of the Pontic kings are of particular interest. But there is much else that is only a degree less attractive.

A Catalogue of the Greek Coins in the British Museum : Cyprus. By G. F. HILL. Pp. cxliv + 120. With one map, a table of the Cypriote Syllabary and twenty-six Plates. London, 1904.

The twenty-fourth volume of the British Museum series deals with one of the most obscure and difficult classes of Greek coins. The proper reading of the legends is in many cases doubtful. Even where it is certain, we are apt to be brought to a standstill by sheer lack of any historical background. In these circumstances the duty of numismatists is clear—to ascertain the real facts and to put them on record with the nearest possible approach to accuracy. This task Mr. Hill has discharged admirably. While refraining from speculation, he has gathered together in his Introduction all the material that has a relevant bearing on the money of ancient Cyprus. No aspect of the questions involved is allowed to pass without full and business-like discussion. The British Museum is exceptionally rich in the issues of the Cyprian mints, and the different specimens are described with a thoroughness that leaves nothing to be desired, the great pains bestowed on the identification of dies being specially worthy of mention. No fewer than nine of the twenty-six plates are devoted to coins in other cabinets. The general result is a book which may be said to lay a solid foundation for a complete *corpus* of Cyprian money, and which is a real credit to British scholarship. The weights of all coins, including bronze imperial pieces, are given. A general index is also introduced, a concession to which the valuable collection of miscellaneous material was fully entitled. It may be hoped that these innovations are destined to become permanent features of this fine series of Catalogues. The plates are very well executed.

Τὰ νομίσματα τοῦ κράτους τῶν Πτολεμαίων. By J. N. SVORONOS. Pts. I., II., and III. Pp. xii + 255 + 324. With numerous illustrations in the Text, and 64 Photographic Plates. Folio. Athens, 1904. 100 f.

Doctus, Jupiter, et laboriosus! Part I. contains an elaborate introduction, including a historical sketch of each reign. Part II. is a catalogue of more than 1900 distinct varieties, with lists of the weights and whereabouts of all specimens known to the author. No pains have been spared to make these lists as complete as possible. Part III. comprises the photographic plates, which may be pronounced fairly successful, especially in view of the fact that the casts have been collected from many quarters, and must have been the work of many hands. The printing and general appearance of the book are admirable, and do infinite credit to the enlightened patriotism that has supplied the funds necessary to secure publication.

It is safe to say that Dr. Svoronos's *corpus* marks an epoch in the study of Ptolemaic numismatics. The difficulties of attribution and arrangement that beset this series are well known. Poole's classification (the real groundwork of which was never other than a little mysterious) has held the field for more than twenty years. It must now be abandoned as inadequate to support the mass of material that is here brought together. In its place Svoronos provides a brand new scaffolding of the most complete and extensive kind. Whether it is destined to a longer life than its predecessor, is a question that time alone

can answer. But even the most sanguine may well feel apprehensive when he notes how quickly some of the author's own opinions have been changed. The order adopted in the Plates occasionally indicates a very different view from that followed in the Catalogue, while the Catalogue in its turn has to submit to chastisement and correction at the hands of the Introduction. Dr. Svoronos is always learned and always ingenious, and he has put into this book a vast amount of honest hard work. His views must inevitably command attention and consideration. But it may be doubted whether the Ptolemaic series will finally yield up its secrets until it has been made the subject of an even more minute and systematic study. Dies, for example, are hardly mentioned at all.

A supplementary part (Part IV.) is promised for the immediate future. Besides additional material, it will contain a summary in French of the whole work for the benefit of scholars who do not read modern Greek easily. Those who do business in the great waters of Ptolemaic metrology are also promised a full and comprehensive discussion of vexed questions. Let us hope that the essay will be more of the nature of a chart than of a lighthouse. In the meantime, the weights recorded in the body of the Catalogue afford abundant food for reflection. This is but one of several features that render the book indispensable to all students of the history of the Greek monarchy in Egypt, and that must win for its author the gratitude of numismatists everywhere.

Asia Minor. [Murray's Handy Classical Maps.] Edited by J. G. C. ANDERSON.
London: John Murray, 1903. Cloth, 2s.; paper, 1s. net.

Murray's Small Classical Atlas. Edited by G. B. GRUNDY. London: John Murray, 1904. 6s.

So much of the material for Mr. Anderson's new map of Asia Minor has been published in this *Journal*, that a notice of its publication seems to be called for. It is an entirely new map, embodying the results of the travels of Mr. Anderson himself, Prof. Ramsay, and various other scholars. The scale is 1:2,500,000, and no less than 14 contours of altitude are indicated by different colours, ranging from sea-level to the top of Mount Argæus, the one spot which is over 12,000 feet. The result is a good conspectus of the physical features of the country; while the information as to roads and sites marks a great advance in the cartography of the region. A full index accompanies the map.

The *Small Classical Atlas*, edited by Mr. Grundy, is the outcome of the series of Classical Maps, to which Mr. Anderson's *Asia Minor* belongs, but is independent of it. It employs the same system of coloured contours, and makes a special point of legibility in printing. Its defect is, that since a large number of coloured printings is incompatible with the low price at which the atlas is issued, the intervals between the contours are considerable, and a deceptive appearance of equality in surface is produced. Thus in the case of Asia Minor the fourteen shades of Mr. Anderson's map are replaced by four, and the highest and lowest of these are of rare occurrence; so that the whole country has an unduly uniform appearance. Nevertheless the atlas (which contains fourteen maps and an index) will be found really useful; and special mention should be made of the plans of Athens and Rome, and the fourteen principal battlefields from Troy to Actium. Mr. Grundy appears to hold still to his former views as to the topography of Pylos.

The following, among others, have also been received:—

Plato. Euthydemus: with revised text, introduction (51 pp.), notes, and indices (81 pp.). By E. H. GIFFORD. Oxford: Clarendon Press, 1905. 3s. 6d. (A very complete edition for the use of University students and the higher forms of Public Schools.)

- Some Aspects of the Greek Genius.** By S. H. BUTCHER. Pp. vi+324. London : Macmillan & Co., 1904. 7s. net. (A third edition of this well-known and stimulating work.)
- Bacchylides.** By R. C. JEBB. [Proc. of the British Academy, vol. i.] Pp. 18. London : Frowde, 1905. 1s. net.
- Ancient Greek Coins.** By F. S. BENSON. Vol. iii. Parts xi-xiv. Pp. 45. 4 Plates. Privately Printed. 1903-4.
- Euripidis Fabulae.** Recogn. G. MURRAY. II. [Scriptorum Class. Bibl. Oxon.] Oxford : Clarendon Press, 1904.
- Catalogue of the Printed Books and Manuscripts forming the Library of F. D. Mocatta.** By R. A. RYE. London : Harrison, 1904.
- Byzantine Constantinople, the Walls of the City and adjoining Historical Sites.** By A. VAN MILLINGEN. 1899.
- Illustrations of School Classics.** By G. F. HILL. London : Macmillan & Co., 1903.
- Notes on Roman Gold Bars from Egypt.** By G. F. HILL. [Proc. Soc. of Ant. 2 Ser. xx.] London, 1904.
- Necropoli e Stazioni Sicule di Transizione.** By P. ORSI. [Bull. di Paleon. Ital. 1902.] Parma : Battei, 1903.
- The Osireion at Abydos.** By M. A. MURRAY, with sections by J. G. MILNE and W. E. CRUM. [Egypt. Research Account, 9th Publ.] London : Quaritch, 1903.

SOME POINTS AS TO THE CHRONOLOGY OF THE REIGN OF CLEOMENES I.

THE two dates which I wish briefly to discuss are those of the Argive Expedition and of the Atheno-Plataean alliance: they are of cardinal importance for the history of Greek politics in an important but very obscure period. The two questions may be considered as independent, and it is possible to adopt the earlier date for one event, and not for the other (as E. Meyer does), but in my judgment the two events are connected, and the date assigned to the one carries with it the date of the other.

First then as to the date of the attack on Argos and the battle of Sepeia. Before the time of Grote this was always placed circ. 520 B.C. on the strength of the passage of Pausanias (iii. 4), 'when Cleomenes came to the throne, he at once invaded the Argolid'; his accession is usually placed about 520, and as this date is generally accepted, it is needless to give the reasons for it here. The date of Pausanias is in itself worth very little. It is true that he has information as to the Argive campaign which is not in Herodotus, and which may be derived from some local chronicler; but this information is given in an earlier book (ii. 20), while in iii. 4 he is mainly following Herodotus. It may be noticed, however, that he certainly is supplementing Herodotus from some other source (*e.g.* the name of the grove of Eleusis, 'Orgas'),¹ and it is not unnatural to suppose that he had reason for giving a date for the expedition of Cleomenes, which differs from that which at first sight *seems* to be given by Herodotus; Wernicke² writes 'perverse eum (Cleomenem) initio regni sui id fecisse (Pausanias) dicit,' but it may well have come from some chronological table (such as the Parian Chronicle).

Another explanation of the date in Pausanias that has been given is that we have here an instance of the well-known chronological rule which dates an event, known to have happened in a certain period, in the *first* year of that period, *e.g.* the invasion of England by the Saxons was put in 449 A.D.,

¹ Pausanias also puts the number of the slain at 5000 (Hdt. vii. 148 gives 6000), and his account of the treatment of Aegina differs materially from that in Hdt. vi. 50 sq. These,

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however, may be merely mistakes, due to Pausanias writing from memory

² De Pausaniae studiis Herodoti, p. 13: this is a very unconvincing piece of Quellenkritik.

because that was supposed to be the first year of Marcianus (quorum tempore Angli a Brettonibus accersiti Britanniam adierunt, Bede v. 24 and Plummer's note ii. p. 27).

It has also been suggested that Pausanias may have had a confused remembrance in his mind of the curious statement of Herodotus that 'Cleomenes reigned no very long time' (v. 48). But it is needless to speculate further; were the statement of Pausanias the only reason for the earlier date, no one would think it worth while to discuss it. I only submit that, if the earlier date be found on the whole to suit here the narrative of Herodotus (vi. 76 *seq.*), the date of Pausanias adds some slight confirmation to our inference.

That Herodotus puts the invasion of Argos *near the end*, and not at the beginning, of the reign of Cleomenes, has practically been agreed since the time of Grote (iv. p. 247): it is sufficient to refer to Busolt (ii.² 561), Beloch (i. 349), and E. Meyer (*G. des A.* iii. 319) in Germany, and to Macan (Herodotus *ad loc.*) and Bury (*Beiträge zur A. G.* 1902) among British scholars: Abbott leaves the question open in his Appendix (i. 448), and gives no date in his narrative. Only Curtius, I believe, of modern authorities supports the earlier date, and even he in his notes (i.⁵ 669) seems to suppose there were *two* Argive campaigns, a compromise that will satisfy no one.

The passage of Herodotus usually quoted as decisive is vii. 148-9, in which the Argives plead that they cannot take part in the resistance to the Persians in 480, because 'they had lately (*νεωστί*) lost 6,000 citizens slain by Cleomenes and the Lacedaemonians, and therefore must (cap. 149) have 'a 30 years' truce' in which 'their children may grow to man's estate.' This passage, however, proves nothing; it is obvious to every reader of Herodotus, it was obvious to Herodotus himself (though he was certainly not an enemy of Argos), that the Argives here were not giving the real reason for their inactivity. In fact Herodotus (ix. 12) records that in the very next year the Argives had 'undertaken to prevent the Spartan from going forth' (to resist Mardonius). This hardly looks like a depopulated country; but we will take later the positive proofs from Herodotus that Argos between 490 and 470 was in the very reverse of a crushed condition.

A second passage quoted is Herodotus v. 49: Aristagoras urges the Spartan king to attack the Persians, and 'to put off fighting against the Messenians, his evenly matched foes, and Arcadians and Argives'; this, says Mr. Macan, 'would have been rather beside the mark' if the Argives had just been crushed. To me the passage seems to favour the other side, if it be worth anything; the Messenians had been undoubtedly crushed; the Arcadians had been reduced to a dependent condition; is it not natural to suppose that the Argives are in the same category? But such allusions of course really prove nothing, even if we could suppose—which of course we cannot—that Herodotus is accurately recording what Aristagoras said (and not writing from the point of view of his own day).

There remains the third—and to my mind only serious—argument from

Herodotus against the early date, *i.e.* the oracle quoted in vi. 77, and in part in vi. 19, in which the fate of Miletus and the fate of Argos are joined together. Now I admit at once that if this passage stood alone, we should naturally consider that the two events referred to must have been about the same time, and that therefore the defeat of Argos falls in the first decade of the fifth century. But if sufficient evidence can be given for the earlier date from other parts of Herodotus, then the evidence of the oracle can hardly be thought in itself to outweigh probability and the balance of evidence.

For in the first place the whole attitude of scholars to this oracle is most uncertain: some (*e.g.* Busolt *ut supra*) consider it a prediction *post eventum*; others like Bury (*ut supra*) build up on the strength of it elaborate theories, *e.g.* that Aristagoras had appealed to Argos (as well as to Athens and Sparta) for help, and that the treasures of Croesus were never given to Delphi at all, but had been feloniously transferred from Branchidae to Delphi: to this latter theory he only refers without adopting it.³ The former theory—that Aristagoras visited Argos, and that Delphi was consulted about the propriety of sending help—may be true, but the silence of Herodotus is a strong argument against it.

The most probable explanation of the oracle is to be found in the story of Telesilla; if this be true in the main (I must refer to Macan *ad loc.* for the strong reasons which can be adduced for this view), then the oracle is a riddling account *post eventum* of what had happened. If on the other hand, the oracle be genuine (either as a whole or in part), and was really given to the Argives (Herodotus himself says the Milesians were not present), its general meaning is so obscure that it proves nothing. The oracle of Delphi might well, between 530 and 520 B.C., have vented its spite against Miletus⁴ by interpolating into an Argive oracle a warning which the position of affairs in Ionia at the time rendered likely of fulfilment.

And it is worth noticing that, in other oracles beside this, the attitude of the Delphic Oracle to Miletus was the reverse of friendly: that city and its Italian partner Sybaris are assailed in tones of prophetic reviling. This fact would render easier the belief that the oracle so far forgot itself as to abuse a city unconcerned in the consultation of the moment.

But this is only a suggestion; and I should also have thought that the *double* nature of the oracle is in itself a most suspicious circumstance. It would be hard, I think, to quote a real parallel to it.

In any case the obscurity of the oracle is a slight argument for the earlier date; Herodotus is far better informed about what happens in the fifth century than he is about the events of even the last quarter of the sixth century; it is sufficient to compare his accounts of the second and the third Aeginetan Wars.

³ This theory is C. Niebuhr's. For the arguments for it, I can only refer to Mr. Bury's pages: to me it seems not worth discussing; so far from 'such divination' serving 'to illus-

trate and accentuate a problem,' it only obscures it.

⁴ Cf. Bouché-Leclercq, *Histoire de la Divination*, iii. pp. 129-130.

Let us now turn to the evidence in Herodotus which seems to show that the Argive defeat was early in the reign of Cleomenes V, not at the end of it.

The first passage, which is entirely neglected by Grote, is vi. 92; Herodotus describes how 1000 volunteers went from Argos to help Aegina in the third Aeginetan War; it must be noted too that they went against the wish of the state, which had good cause to complain of Aegina for lending ships to Cleomenes. Now the date of this war is uncertain; but it cannot be later than 485, and may be earlier than 490. Can we suppose that a state depopulated of its warriors would in less than 10 years, perhaps in five, be sending out 1000 warriors in a quarrel that did not concern it?

I have already referred to the position of Argos and its apparent strength in the Persian war; but what followed? At some period between 475 and 465, Argos was able once more to dispute the hegemony of the Lacedaemonians in the Peloponnese: I refer of course to the battle of Tegea (Hdt. ix. 35). This renewal of the age-long struggle between Argos and the Lacedaemonians is more probable after fifty years than after twenty-five. It may be objected that, according to my own theory, the struggle was renewed in the preceding century after only one generation, for the war 'of the 300' (Hdt. i. 82 *sq.*) was about 550, and the battle of Sepeia about 520. But the cases are not parallel: there is no evidence that the defeat of Argos in the middle of the sixth century was carried out with the awful thoroughness of the work of Cleomenes. And there is a further point to be considered. Herodotus tells us with considerable precision of the results of the Argive defeat at Sepeia (vi. 83); so depopulated was the city that the *δοῦλοι* became masters of it 'till the sons of the slain grew up,' a period for which we must allow something like twenty years; then followed a war in which 'the slaves' were 'driven out' to Tiryns; then a period of reconciliation (*ἄρθμια*),⁵ and then the final war which lasted 'a considerable time,' and in which the Argives 'with difficulty' conquered. If we place this victory and the capture of Tiryns (with Busolt) about 472-1, it would certainly seem that the twenty-four years between this and 495 are much too few for the recovery of Argos; I admit that on the other hand the fifty years since 520 seems a rather needlessly long time for recovery; but the difficulty of excess of time is only an apparent difficulty.

There is another class of evidence bearing on the date of the recovery of

⁵ The weakness of Argos in the fifth century has been inferred from the independence of Mycenae and Tiryns: that the two towns were independent, is shown by the fact that they took part in the Persian war on the patriotic side. It does not necessarily follow, however, that we must assume the later date (*circa* 495) for the defeat of Sepeia. If this took place about 520, the first generation (520-490) would be occupied with the recovery of Argos; then follows this period of 'reconciliation' in which

Argos, though herself strong enough to reassert her authority completely over her Perioikid states, dares not do so till an opportunity occurs when the Lacedaemonians cannot interfere. It is during this period that Mycenae and Tiryns seek to assert their independence by joining the Greeks against the common foe; to compare small things with great, their policy would be the same as that of Cavour joining the Allied Powers in the Crimean War, in order to bring Sardinia to the front.

Argos, which must be just referred to—I mean the evidence as to its school of sculpture. Ageladas the Argive was the most famous sculptor of his day in Greece, and in his school were trained Myron, Pheidias, and Polycleitus; the usual date for his 'floruit' is from 500 to 460⁶; this seems required by the fact that he is credited with trophies which must be subsequent to 468 and 460 respectively (Pausanias x. 10. 3; iv. 33. 3); if this be correct, it seems to require us to assign Cleomenes' victory to the earliest possible date: a depopulated and distracted city could hardly be the home of a flourishing school of art.

To sum up then this part of my argument: the earlier date for Cleomenes' expedition is supported by the fact that Argos was strong again by 475, that she had abundance of warriors at least ten and perhaps fifteen years earlier, and that at least thirty years must be allowed for the terrible social changes which followed her defeat by Cleomenes.

I have still a good deal more to say as to the probability of the earlier date, but it had better be said after I have discussed the reason for accepting or rejecting the date given by Thucydides for the Atheno-Plataean alliance. As everyone knows, he puts this (iii. 68) in the ninety-third year before the capture of Plataea, *i.e.* in 519; but since Grote's argument against this date, it has been usually given up, and one ten years later adopted; it is indeed quite easy to conjecture that the text (*cf.* Busolt ii. 399 n. 4, *v. Macan ad loc.*) of Thucydides has become corrupt in its figures. Of the modern historians quoted above, Meyer (ii. 780) still prefers the old date, following the sound principle of 'when in doubt, trust Thucydides'; and Beloch (i. 340), without pronouncing definitely, rejects Grote's arguments; the majority, however, here also reject the old date and accept the new one.

What then were the grounds of the great English historian for leaving the authority of Thucydides, a thing which, as he says, he was very unwilling to do? They are four:

(1) We cannot explain the presence of King Cleomenes in the neighbourhood of Plataea in 519; in 509 it is easy, as he was then busy with the settlement of Athens.

(2) Had the alliance been made in 519, the name of Hippias must have occurred in the story; for he then was ruler of Athens.

(3) The narrative of Herodotus (vi. 108) represents the Plataean alliance as offered to Athens on the suggestion of Cleomenes, and further that this suggestion was due to a desire to embroil Athens and Thebes. Yet Herodotus represents the Peisistratidae as friends of the Lacedaemonians (v. 63).

⁶ This date is accepted without question by Professor Waldstein in his great book on the Argive Heraeum; Pausanias attributes to Ageladas works commemorating a Tarentine victory of about 468 (x. 10. 3), and a Messenian victory not earlier than 460 (iv. 33. 3); others (*e.g.* Busolt, ii. 2. 561) ante-date his 'floruit' to 520-480, *i.e.* make it precede the defeat of Argos by Cleomenes. This earlier date is sug-

gested by the dates of the three Olympic victories commemorated by Ageladas (which fall between 520 and 507); but these may have been put up some time after the event. The whole question is discussed by Frazer (Pausanias, iii. 438-9), who inclines to decide for the earlier date on the ground of a recently discovered inscription; his argument does not seem very convincing.

(4) Herodotus tells us (v. 78) that the Athenians under the tyrants were unenterprising and cowardly; how then can we credit them with courageously helping Plataea, and with the brilliant victory over Boeotia, described by Herodotus (vi. 108) as following the alliance?

Let us examine these arguments in detail.

(1) The first sounds plausible, but does it really prove anything? We do not know why Cleomenes should have been near Plataea in 519. But why should we? Do we know where he was in 518 or 517 or in any year down to 510?

One thing, however, we do know, which may enable us to *guess* why the Spartan king should have been in the north of the Peloponnese in 519, *i.e.* it seems to have been in this decade that the Peloponnesian Confederacy was being organized. This league certainly is fully developed about 509 (v. 91), and its development must have taken some time. Surely then we have some authority for supposing that Cleomenes may have been in the neighbourhood of Plataea at the time in question.

And I cannot help thinking that we may have a more definite trace still in Herodotus' own narrative elsewhere. In v. 68 he tells us that the anti-Dorian arrangements of Cleisthenes at Sicyon lasted 'while Cleisthenes was tyrant and when he was dead also for sixty years.' Now Cleisthenes died about 560 (the date is uncertain), and this would give about 500 for the date of the revival of Dorian institutions at Sicyon; but this date does not fit in with our general knowledge of the period, and we may perhaps suppose that Herodotus' informants (whom he imperfectly understood) reckoned 'the sixty years' from the date of the establishment of the new tribal names; this must almost certainly have been in the decade following 585 and Cleisthenes' great triumph in the first Sacred War. In that case the Dorian reaction at Sicyon would be about 520, and would coincide with the victorious activity of Cleomenes. This point, however, cannot be pressed.

So much for Grote's first argument.

His second argument involves, it must be said, an entire misconception of the nature of Herodotus' narrative. Without accepting all, or half, that has been written on 'Quellenkritik,' it yet remains true that a considerable advance has been made in our methods of studying Greek history since Grote's time, by a careful attention to the authorities which underlie the narrative of Herodotus. He was dependent for his facts on his informants; he checked them by his general principles of evidence; but he had not, for the sixth century at all events, a chronological scheme sufficiently fixed to enable him to co-ordinate his different traditions. Hence Herodotus writing the story of the Plataean alliance from the mouth of a patriotic Athenian would naturally hear nothing of Hippias in 519, although Hippias was ruling Athens at the time; and it would never occur to Herodotus himself to add the name of the tyrant, although he had received (and recorded elsewhere) evidence to show that the diplomatic activity of the Peisistratidae was widely spread over Northern Greece and the Aegean.

The same argument disposes of Grote's fourth point. No one now

would be likely to take literally Herodotus' words in v. 78; the Athenians of the Peisistratid time were not of the same heroic breed as the *Μαπαθωρομάχαι*;—that was what Herodotus meant to say, and in that sense we understand him—but they were already a people with imperial instincts and quite ready to welcome an alliance which opened to them the passes of Cithaeron.

There remains Grote's third argument, which I believe is generally considered the most important, *i.e.* that the Peisistratidae were 'especially friendly' to the Lacedaemonians, and that therefore Lacedaemonian diplomacy was not likely to try to embroil them in Bocotia. Beloch (*ut supra*), although he tends to accept Thucydides' date, is contemptuous of Herodotus' argument, and talks about 'borrowings from the relations of the fifth century.' Neither Herodotus nor Beloch can give any absolutely certain information as to motives; but I would rather trust the inferences of the most widely travelled Greek of the fifth century B.C. than the theories of a professor in his study at the latter end of the nineteenth century A.D. But this is a question of taste.

Let us look at the facts. There is, I suppose, no doubt that the whole policy of Cleomenes was to extend the influence of his countrymen in the Peloponnese and in Central Greece: by this policy all his acts and his refusals to act (which are quite as significant) can be explained. There is also no doubt that the power of the Peisistratidae, based as it was on alliances more or less formal with Argos, Eretria, Thebes, Thessaly, Macedon, and some of the Aegean islands, was a most serious, it might be said, an insuperable obstacle to his success. What more likely then than that the Lacedaemonians endeavoured diplomatically to undermine⁷ their 'very dear friends,' the Peisistratidae, before they attacked them. More must be said in a moment as to the continuous policy that runs all through the reign of Cleomenes; but there are one or two further points which must be made here, which especially concern our special point, the date of 519 for the Atheno-Plataean alliance. A curious coincidence of language has been pointed out by Meyer (*ut supra*): Cleomenes (Hdt. v. 74), when invading Attica after his expulsion (about 508) found 'Oenoe and Hysiae,' 'the border demes of Attica,' an extension of frontier, which Herodotus (in vi. 108) says was the result of the victorious issue of the war that followed the Atheno-Plataean alliance; but this, though interesting, is certainly not decisive. But it may fairly be asked—which date suits better the adoption of Plataea as an ally—519, when Athens was apparently in the height of her power, or 509, when she had just passed through a revolution, was torn by faction at home, and had bitterly exasperated the Lacedaemonians and their king? We know that at the later date, 509, one party was prepared to purchase allies even at the price of degrading submission to the Great King (v. 73). Would the state then have deliberately gone out of her way to provoke an old ally? But in 519 the alienation of Thebes is not unnatural; the old tyrant had done his best to

⁷ Their policy is an exact anticipation of time of the revolt of Thasos 50 years later. their policy towards their Athenian allies at the

keep on good terms with all his neighbours. The young tyrant was for a spirited foreign policy and the extension of Athenian influence. The policy of Peisistratus would have been wiser than that of Hippias, but—even apart from probability—modern analogies might make us doubt whether young rulers are always wiser than their predecessors.

To sum up then the arguments for the early date, 519, for the Atheno-Plataean alliance :

(1) It rests on the express statement of Thucydides.

(2) It suits the condition of things in Athens much better than the later date.

(3) And the motives suggested by Herodotus for the Lacedaemonian part in it are in accordance with all the traditions of their policy, and I hope to show in accordance with their actions in this very decade.

For now we must turn to discuss the chronology of Cleomenes' acts from the positive side, and show how, if we adopt the earlier date 520 for the attack on Argos and 519 for the Atheno-Plataean alliance, a more consistent scheme can be obtained for his character and actions than in any other way. It is generally assumed, as has been said, that he ascended the throne about 520. Would he have been likely to take decisive action at once?

So far Lacedaemonian policy had moved forward resistlessly from success to success; the century from 750 to 650 (to assume the traditional dates) had given her the mastery over the south of the Peloponnese; the century from 650 to 550 had, after a long struggle, culminated in making her paramount in Arcadia. The close of this period had seen Argos decisively thrust back from the border region (perhaps for the first time, perhaps when trying to undo former defeats). The time was now ripe for another step in advance; were Argos out of the way, the Peloponnese could be formally united under Lacedaemonian *ἡγεμονία*. That this was so the circumstances of the next ten years proved; it is probable that the young king saw it, and resolved to strike at once. And he had private reasons for doing so; his succession to the throne was not a popular one; if anything is clear from the narrative of Herodotus, it is that Dorieus and Leonidas had a strong party in Sparta (v. 42) from whom Herodotus derived much of his information. It is surely then in accordance with probability that Cleomenes should have wished to show at once that he was a genuine son of Anaxandrides and to silence murmurers by a brilliant success.

Probability then—apart from other evidence—would lead us to put the Argive expedition early; and the sequel confirms this. It has been suggested, almost with certainty, that the decade from 520 to 510 saw the establishment of the Lacedaemonian Confederacy; but even apart from this, it seems to me impossible to reconcile the certain facts as to Cleomenes in the first half of his reign with the existence of a strong Argos. We know that in 510 and the following years, the Lacedaemonians interfered, or sought to interfere five times in the affairs of Athens. Is it possible that this could have been done so freely with a strong Argos threatening their flank all the time? Argos was certainly friendly to the Peisistratidae (cf. Hdt. v. 94).

Why were not some of her 6000 warriors engaged either in the defence of Attica (as the Thessalians were) or in making a diversion in the Peloponnese? But if we assume the date of 520 for the victory of Sepeia and the crushing of Argos, all becomes clear: Cleomenes has a free hand in the Peloponnese and uses it to organize the Confederacy; and meantime he prepares for the next move forward by sowing trouble for Athens at home. Modern diplomacy gives us good instances of how a policy of blood and iron does not disdain to use intrigue to prepare its way, and to isolate its enemies.

So far then from thinking that the attempt at estranging Athens and Thebes in 519 needs explanation, I should have thought that the date justifies itself. The policy was a preparing of the way for the direct attack on Athens which was to come in 510. But it will be objected at once that the attack of 510 is said by Herodotus to have been due only to the Delphic Oracle, corrupted it is true, by Alcmaeonid gold and marble, but none the less obeyed implicitly by Cleomenes and his people. Now I confess that I do not like departing from the statements of Herodotus, but it is necessary not to overlook several obvious points.

(1) The whole business happened more than thirty years before he was born, and he was therefore completely dependent on his informants.

(2) These informants were certainly Lacedaemonians and Delphians in this part of his narrative, and perhaps Alcmaeonids also.

(3) And what they told him was the truth, but not the whole truth. It was quite true that the ordinary Lacedaemonians heard with wearisome iteration 'Athens must be delivered.'

The only detail omitted was that this message was dictated as much by Lacedaemonian policy as by Alcmaeonid intrigue. What happened was surely this; the old policy of putting down tyrants and putting up oligarchies (*ἐπιτιθέσθαι τοῖς Λακεδαιμονίοις*) had pretty well attained completion in the Peloponnese.

Cleomenes thought he saw an opportunity of carrying it out in Central Greece as well. But the ordinary Spartan did not see so far ahead as the king, and therefore a little religious pressure was applied to encourage him. It will hardly be said that we are doing Cleomenes an injustice in suggesting that he knew how to work an oracle; it is surely more probable that, where intrigue was concerned, he was one of the deceivers, not one of the deceived.

The story of Herodotus is three parts true and the fourth part is suppressed, because it was no one's interest to tell it. Cleomenes made a mistake, for he could not foresee that Athenian democracy was ready to come forth when the pressure of the *τυραννίς* was removed; he was the ablest statesman in Greece, but a man of 'blood and iron' was constitutionally incapable of estimating the power of the Solonian ideas, which had been working for three quarters of a century in Athens. When he found that he had cast out tyranny only to let in a still worse enemy to Lacedaemonian *ἡγεμονία*, he conveniently suppressed his mistake. And it was not likely the Alcmaeonidae would reveal it; there were too many shady pages in the

history of that great family for them to be eager to tell the world in the fifth century that their patriotic hostility to Cleomenes had begun in sharing with him a not very creditable intrigue.

If then this version of the facts can be trusted, we have for the first half of the reign of Cleomenes a brilliant success, followed by wide and permanent results in the Peloponnese, and a brilliant failure, which simply showed how easily the best laid plans go astray.

The character of the rest of the reign of Cleomenes is very different. The failure at Athens and the quarrel with Demaratus, who constantly thwarted his plans, seem to have changed his character and certainly rendered him unpopular; this I think may fairly be assumed from Herodotus' accounts of his latter days; we shall hardly believe that he was suffering from the wrath of Demeter, as the Athenians said (vi. 75), or of Apollo, as the Greeks generally said (*ib.*), or of the hero Argos (*ib.*), as the Argives said. We shall be more inclined to believe that he suffered from intemperance, though it is more likely that this was the cause of the story that the Scythians visited Sparta (vi. 84) than the result of that visit. It seems difficult to think that Cleomenes would have been credited with madness and intemperance for nothing. Those who put his greatest success in the last period of his reign ought to account for the unfavourable tradition that certainly prevailed as to him in Herodotus' day. It is easy to explain, if ten years of success were followed by twenty years of failure; it is difficult to reconcile with the activity successfully maintained to the last, which is postulated by the late date for the Argive expedition. Perhaps even the strange statement of Herodotus in v. 48 may be partially explained in this way. It is very odd to say of a king who reigned at least thirty years that he 'reigned no very long time'; as Macan has well pointed out (*ad loc.*), Herodotus may have been thinking for the moment only of the fact that the brother of Cleomenes succeeded him: the historian was never very strong in chronology. But Herodotus' mistake is the easier if the brilliant part of the reign of Cleomenes was concentrated in the first twelve years.

It may be said that I am neglecting the events of the very end of his reign, the deposition of Demaratus, the crushing of Aegina, the exile, the flight to Thessaly, the intrigue in Arcadia; but these shows of vigour would confirm rather than refute the gloomy opinions held at Sparta of the latter part of the great king's reign. His feverish activity was disastrous to his country, or would have been called so in the next generation: he strengthened the hereditary foe by weakening Aegina, he was the cause of the first of that long succession of royal banishments which shed a gloom over Sparta in the fifth century, and he showed the weakness of Lacedaemonian hegemony by anticipating (vi. 74) the most serious blow which it was to suffer from the great Epaminondas more than a century later. 'Better,' a Spartan would have said, 'any amount of sloth than such activity as that of Cleomenes in the last short period of his life.'

I have not attempted to discuss the chronology of these last years, because it seems to me the data are quite insufficient. It certainly appears

that some of these final acts of Cleomenes must be subsequent to Marathon, and it is most natural to put his death about 488. But, as I have said, there is no real evidence on the point; and in any case it does not matter. Cleomenes' activity at the beginning of his reign had been the determining force in Greece; all agree that he was the final organizer of Lacedaemonian *ἡγεμονία* and the (involuntary) creator of the Athenian democracy. His later acts have no results; the old order of things had changed, and new problems had to be faced by new actors.

To sum up my points then; it seems:

(1) That the early dating of the successes of Cleomenes suits all the passages in Herodotus—except the mysterious oracle.

And it enables us to accept the direct statement of Thucydides.

(2) What is to my mind as important, it suits the whole tone of Herodotus' narrative as to Cleomenes.

(3) It is in accordance with all probability. Cleomenes is one of those meteor-like princes whose reign begins with success, and ends with gloom. He is like Francis I. of France or Charles XII. of Sweden. But I confess I am unable to find a parallel for him if he crowned the last years of his long reign with his most brilliant success, and yet, in spite of it, died under a cloud of obloquy.

(This paper was read in substance before the Oxford Philological Society in May, 1904. I have tried to incorporate certain points which were raised in the discussion which followed.)

J. WELLS.

THE GREEK WARSHIP.

(Continued from page 156.)

II.

E.

THE evidence considered under *D* makes it, I think, impossible that the accepted theory can be true as regards the larger polyereis of the first three centuries B.C., which clearly were galleys a scaloccio of some sort. If what is put forward under *A* be true, the *reason* why the accepted theory was invented⁷⁷ and has been so largely believed disappears. Nevertheless, there is still room for evidence that will support the accepted theory as to triremes generally, the quadriremes and quinqueremes of the fourth century, and the biremes of the first; and the theory may be true, even if the words thranite, zugite, and thalamite do refer to another arrangement.

For a trireme, said Cartault, the evidence is overwhelming. Unfortunately he omitted to mention what it was, and with the best will in the world I have been unable to discover it. Assmann (1610) relied solely on the monuments. Luebeck however gives Schol. on Aelian's *Tactica*, Schol. on *Frogs* 1074 (see under *A*), Arr. *Anab.* 6, 5, 2 (see under *B*), Pollux 1, 87 (see under *A*), and *Frogs* 1074. Let me add Livy 33, 30, Aesch. *Agam.* 1617, Luc. *Phars.* 3, 529 *seq.*

The Scholion on Aelian⁷⁸ (which I do not consider evidence) would be quite well satisfied by a galley, whether one a zenzile or one a scaloccio, in which the rows of rowers, taken as parallel to the long axis of the ship, should rise somewhat from the side of the ship toward the long axis. The phrase 'exstructi remigis' of Luc. *Phars.* 3, 530⁷⁹ may well refer to the same thing;

⁷⁷ According to Luebeck, its first modern supporter was Scaliger, relying on Schol. *Frogs*, 1074. But it existed when De Baif wrote in 1536.

⁷⁸ ἡ μονήρης καὶ διήρης καὶ ἐφεξῆς κατὰ τοὺς στίχους τοὺς κατὰ τὸ ὕψος ἐπ' ἀλλήλοις. Should anyone think I am unfair to the scholiasts, I would now refer to the chapters entitled 'The explaining of obsolete words' and 'The explaining of matters of fact' in Dr. Rutherford's recent volume *A Chapter in the History of*

Annotation.

⁷⁹ Validaeque triremes
Quasque quater surgens exstructi remigis
ordo

Commovet,

Celsior at cunctis Bruti praetoria puppis
Verberibus senis agitur molemque profundo

Invehit et summis longe petit acuora
remis.

while the 'summis...remis' of line 537, translated of course as 'thranite' oars, really answers to *celsior* two lines earlier; Brutus' *hexeres* was higher than the other ships and its oars were (necessarily) the highest and longest in the fleet. *Agam.* 1617⁸⁰ may only mean that the thalamite squad were, or had once been, somewhat nearer the water than the zugite squad, as is probable enough; unless *νεπτέρα* be a mere convention. *Frogs* 1074,⁸¹ taken literally, is of course dead against every version of the accepted theory, except Graser's: it no more suits Assmann than it does Bauer, Fincati, or Weber; moreover that *θαλούμαξ* = *θαλαμίτης* is mere Scholiast's guesswork. It is undoubtedly a bit of slang; Fincati refers to a similar expression in the Venetian dialect, and probably a professor of argot could parallel it in every language.

There remains Livy, 33, 30.⁸² Bauer (p. 462) and Weber have recognised the truth of the old view that the larger polyereis were named from rows of *rowers*; but the use of *ordines remorum* (or *versus remorum*) requires clearing up. It is obvious that, on *any* theory, it was a matter of indifference in a trireme, with one man to one oar, whether one said *ordines remorum* or *ordines remigum*. The Romans seem to have inclined to *ordines remorum*, the Greeks to *στοῖχοι ἐρετῶν*. When the galleys a *scaloccio* came in, *ordines remorum* ceased to be correct, but people went on using it; instances of such 'survivals' are common enough in English. This is strongly borne out by a passage in Florus, which has not been cited: 2, 21 (4, 11) Antony's ships at Actium had a *senis* in *noventos remorum* ordines, Octavian's a *binis remigum* in *senos* ordines. They were of course built on the same system; it was indifferent which phrase was used.⁸³ *Ordines remorum* then means only 'rows,' like *ordines*.

The only two phrases in all this that are of much use to an upholder of the accepted theory are Lucan's *exstructi remigis* and the Scholion on Aelian. One cannot build a theory on one epithet in a poet, and both phrases are, I think, easily explicable; but in case anyone should suggest that I find it convenient to say that the Scholion on Aelian (whatever it may mean) is not evidence, I would point out that, if I may cite scholia, there is one on Thuc. 7, 40, 5 which almost settles the question.⁸⁴

⁸⁰ οὐ ταῦτα φωνεῖς νεπτέρα προσήμενος
κώπη, κρατούντων τῶν ἐπὶ ζυγῷ δορός;

We have here a reference to a ship in which the zugite was the most important person, and so not a trireme; and as it is too early for a bireme, it bears out section *B*; it was a *μονήρης δίκροτος*. The importance of the zugite here came from his being the stern oar; see n. 30. Is it not possible however that the contrast is between oarsmen and fighting men, with a play upon *δορός*?

⁸¹ προσπαρδεῖν ἐς τὸ στόμα τῷ θαλάμακι.
Anyone inclined to take this literally should read Jurien de la Gravière's remarks in *La Marine des Anciens*.

⁸² Quam sexdecim versus remorum agebant.
A translation of *ἐκκαιδεκῆρης* in the corresponding passage in Polybius.

⁸³ This may help to explain Lucan's '*senis-verberibus*' (n. 79) which refers to *one* *hexeres* only, and should on the accepted theory be *sex verberibus*, if it were to refer to the beat of the six banks. It means 'with sixfold strokes' 'strokes worked (or made) by six (men) apiece.' Lucan's quadriremes have not four ordines, but a fourfold *ordo*.

⁸⁴ Thuc. 7, 40, 5 the Syracensans in boats ἐς τοὺς τارسούς υποπίπτοντες τῶν πολεμίων νεῶν. Schol. ὑποδύμενοι ὑπὸ τοὺς τارسούς. If the schol. be right, as Bauer supposed, the accepted

Now as to the monuments. Breusing was the first to call for a thorough-going criticism. How badly it was (and is) wanted anyone can see who will refer to the astounding cases of misuse given by Mr. Torr in his preface (p. ix): and these are by no means the only instances.⁸⁵

Omitting coins and Trajan's column, we are supposed to have about 15 representations of biremes, 3 of triremes, and none of larger ships. Of the 'triremes,' only one really matters, the so-called Lenormant relief in the Acropolis Museum at Athens (possibly fourth century).⁸⁶ The 'biremes' fall into two groups, one belonging to the seventh and sixth centuries, the other to Hellenistic and Roman times. The most important of the latter group are the prow from Samothrace, in the Louvre (the only monument we can check by written evidence); the ship from the Temple of Fortune at Praeneste, in the Vatican Museum; and the Palazzo Spada and Ludovisi ships.

I do not count the river boats on Trajan's column. If any one cites them in proof of superposed banks, I may also cite them as proof that the upper oars were rowed over, or through, a fretwork railing, the lower without port-holes; that the rowers used their oars like Canadian canoe paddles,⁸⁷ had

theory is in a bad way, of course. But the schol. must be wrong. The same phrase in Dio Cass. 50, 32, 8 clearly means driving the ship across the oars so as to break them; he adds *καὶ τὰς κώπας συναράσσοντες*; and warships could not go *under*. Cf. Polyb. 16, 4, 10 *ἐμπιπρόντων ἐς τοὺς ταρσοὺς*.

⁸⁵ See Bauer 367 n. 1 on the so-called Malay breme. See also two startling sections of triremes in Kopecky, *Die Attischen Trieren* (1890) plates 21 and 22, which he calls 'sehr beachtenswerthe Abbildungen alter Schiffe,' from Rondelet. 'Die erste (fig. 21) ist der Abdruck einer Medaille' etc. On turning up Rondelet (1820) I found, of course, they were Rondelet's own sections, the most worthless of guesswork; of fig. 21 Rondelet does not even pretend to figure, or refer to, any original, but merely labels it 'after a medal.'

⁸⁶ The two triremes in the Naples Museum, figs. 1676 and 1691 in Baumeister, the first from Pompeii and the other from Puteoli, are, I think, of no great value, as the top oars could hardly reach the water; but the way the oars are laid in threes, one actually upon the other, can be meant for nothing but three oars to a bench all issuing in a sheaf from one opening. The spirited Isis-temple ships, the only ones that give any idea of the general look of an ancient warship, are of no value for the 'problem.' I have not seen any representation of the Ulubad 'bireme'; but according to *B.C.H.* 12, 190 the oars (14 in number) are in groups of two, side

by side. If not a moneres, it would seem to add little to what can be learnt from the Palazzo Spada ship. Two recent discoveries, the ship on a metope of the Treasury of the Sicyonians at Delphi (see Assmann in *Jahrb.* 1905, p. 32), and a graffito on the wall of a tomb near Anfushi bay in Egypt, to which Mr. G. F. Hill kindly referred me (Dr. G. Botti in *Bull. de la Soc. Archéol. d'Alexandrie* (1902) p. 13 seq. and Admiral Blomfield *ib.* p. 37), do not bear on the problem of the oars; though the latter ship (called late Ptolemaic) is interesting as showing a further development of the *navis ignifera* used by the Rhodians in 190 B.C.

⁸⁷ Every oarsman will sympathise with Arenhold, *Die historische Entwicklung der Schiffstypen* (1891), when he says bluntly that every monument on which the oars 'ganz steil in's Wasser tauchen' is self-condemned. I would like to say the same of every similar reconstruction, and of every monument which shews an oarsman grasping the oar from underneath and with no possibility of getting his feet against anything. Mr. G. C. V. Holmes, *Ancient and Modern Ships* (1900), suggests that the monuments shew that the art of rowing was *not* understood till the Liburnian came in. But some mediaeval pictures also shew the oars at an absurd angle; e.g., C. A. Levi, *Navi Venete*, pls. 28 and 31; and it seems incredible that any people should row for centuries without discovering the proper angle for the oar to make with the water.

one hand *under* the handle, and sat bolt upright at the end of the stroke, and that a bireme had only eight oars aside, and a long list of other absurdities. The oars of the 'trireme,' in particular, are just plastered on anyhow; and it is an open boat. 'The design' says Mr. Torr 'makes little pretensions to accuracy.' It is high time that it vanished from the text books.

And I need hardly say that I do not count dal Pozzo's sketch, interesting as it is; for it is not known from what it is taken.⁸⁸

The prow from Samothrace. Assmann has been much praised for calling this a bireme. But, apart from the question whether the holes seen in the monument are really portholes,⁸⁹ if one assumes, as certainly Assmann does, and I think every one else, that the monument celebrates Demetrius' victory at Salamis, certain consequences seem to follow as matter of history, which must be considered.

In Alexander's lifetime quinqueremes were the highest value in use.⁹⁰ Somewhere between his death and the first Punic war the change of system that introduced the scaloccio galley (see section *D*) must have taken place:⁹¹ and as the higher values undoubtedly took their origin as fighting machines from the time when Antigonus the One-eyed resolved to build a fleet and command the sea (Diod. 19, 58 and 62), we shall not be far wrong in assuming that the change of system originated at the same time (though this is not perhaps very material), both alike being due to the inventive mechanical genius that made Demetrius famous as the Besieger of Cities. Demetrius with the new fleet, including seven heptereis and ten hexereis,⁹² beside smaller values, sailed for Cyprus, and met Ptolemy, who (naturally) had nothing larger than quinqueremes, at Salamis. Demetrius massed his strength, including all his heptereis and hexereis, on his left wing, which he led in person on a hepteres; and the picture given by Diodorus of Demetrius in

⁸⁸ Graser published it (*Arch. Zeit.* 1874 vol. 32, p. 71). It is now in the British Museum (Dept. of Gr. and Rom. Antiq.) It is certainly not a drawing of the Lenormant relief.

⁸⁹ Two slits in the *παρεξίπρεστιά*, on which Eius, *Das Rudern bei den Alten* (1896), has based what appears to be an attractive theory of the *διέκπλους*. I have not seen his book. Torr follows Graser in saying the holes are for ropes for an anchor: but if so they should be further forward. If they are not portholes, this hepteres had seven men to an oar, as the monument shews that no oars could be rowed anywhere except through, or resting on, the *παρεξίπρεστιά*.

⁹⁰ With a possible reservation in favour of one or more hexereis in Sicily, n. 51.

⁹¹ Polybius has been so abused for saying that the Romans had no experience of building quinqueremes and required a Carthaginian model, that I feel the utmost diffidence in suggesting that the basis of the story is merely

that the Carthaginians had got the new system and the Romans had not. Polybius does *not* say that they copied a stranded quinquereme; he says (1, 20, 15) that they built their whole fleet (*i.e.* quinqueremes and triremes) on the model of a stranded *cataphract*. Ihne's criticism (*Röm. Gesch.* 2, 49), that they had Syracusan models to hand, is beside the point. We, for instance, had many English models to hand in the Napoleonic war; yet I have read that we often copied the lines of French prizes.

⁹² According to Diod. 19, 62, three emereis and ten dekereis were built. This may be an anticipation; anyhow, they did not go into action. Plutarch gives no details of size. Beloch, *Gr. Gesch.* iii. 1, 159 n. 1, defends Diodorus' account, as against Niese, and says it is the best picture of a sea-fight of the time that we possess. This seems to overlook the battle of Chios just a century later.

action on the stern of his big ship, rejoicing in the battle, with his three armour-bearers fallen round him, is not only entirely in character with all that we know of Demetrius, but is the sort of picture that becomes traditional and gets handed down correctly. He gained a crushing victory, due to his own big ships which he had led in person (his other wing was defeated); and we might know, even if Diodorus had not expressly said so, that Demetrius, being such as he was, could not help sending the biggest ship he had to carry the news to his father. The impression the big ships made in the Hellenistic world was great; Demetrius built bigger and bigger; Lysimachus tried to rival him;⁹³ in mere size the Ptolemies soon went far ahead of all competitors. And in the face of this, how *can* the prow of Samothrace represent anything but Demetrius' hepteres, any more than a monument of Trafalgar could represent any ship but the Victory? And if this prow be a hepteres, the accepted theory goes by the board at once as regards heptereis.

Assmann's selection of a bireme to explain this monument seems most unfortunate. He calls it the 'swift Aviso' sent to carry the news. But Diodorus (20, 53) says a hepteres (τὴν μεγίστην ναῦν) was sent: and one cannot advance by throwing over even Diodorus without good reason and taking to guesswork. If it is to be a bireme, one must begin by showing that it has nothing to do with the battle of Salamis. But the real point is that there is no evidence for the use of biremes at all till far later. I may well have missed some inscriptions; but subject to this, I believe that *διήρης* hardly occurs in Greek at all, and not before Pollux (second century A.D.); biremis is not found in Latin literature before Caesar and Cicero, or referring to an earlier period than theirs⁹⁴; *δίκροτος* has already been dealt with,⁹⁵ and only takes us back to the Mithridatic wars.

There is then no reason for calling the prow of Samothrace a bireme. Its elucidation as such is a good instance of a method which seems to me a wrong one.

The Dipylon 'biremes' have been explained as a first attempt at perspective,⁹⁶ and this may be true; but they may also be due simply to the

⁹³ Lysimachus' great okteres, the *λεοντοφόρος*, is said to have distinguished itself in the sea-fight between Ptolemy Keraunos and Antigonus Gonatas; Memnon 13 = *F. H. G.* 3, 534, τὸ ἐξάρετον ἔφερον. The change of system obviously came in before this ship was built, whatever Memnon's description exactly means.

⁹⁴ Livy 24, 40 (nuntiantes, Philippum primum Apolloniam tentasse, lembis biremibus centum viginti flumine adverso subvectum) is an apparent instance to the contrary. But we know all about these lembi, which Philip had built on the Illyrian model (Polyb. 5, 109) and which fought so well at the battle of Chios; and they were certainly not biremes (n. 60). The explanation is flumine adverso; they were

going up stream and to get more power the oars had been double-banked for the occasion. Double-bank, 'to provide . . . with two rowers for each oar'; see Murray's *Dict. s.v.* I wish to thank my friend Mr. Colin Campbell for calling my attention to this word, which he tells me is still in use, and which aptly explains this puzzling passage. As to Pliny 7, 56, see Appendix.

⁹⁵ See n. 40.

⁹⁶ Pernice, *Geometrische Vase mit Schiffdarstellung* (*Jahrb.* 1900, p. 92), on the ship published by the late Dr. A. S. Murray, *J.H.S.* 1899 (vol. 19), 198. I gather that in 1900 Pernice no longer held the view he had taken in 1892 as to the fragments of dipylon-ships,

desire of a very crude artist to show two sets of oars because he *knew* that a ship had a set on each side.⁹⁷ It is difficult to see how any one ever took such a ship as that in *J.H.S.* 1899, Pl. VIII., for a bireme of two superposed banks; for even an artist of the Dipylon period may be supposed to have known that oars should be able to reach the water and not stop short in mid-air. And if, as Pernice, Helbig, and von Wilamowitz have supposed, these Dipylon ships are Athenian, how came Athens to return for a couple of centuries to the more humble ships of a single bank? A question often asked and never answered. Assmann avoids it by calling the Dipylon ships Phœnician.

There are three Assyrian reliefs from the palace of Sennacherib, one in the British Museum, and two figured but not brought home by Layard, of which one has no ram. These shew oars in two rows, at no great interval of height, arranged in a zigzag thus, the lower oars in the intervals of the upper ones. The same thing is shewn on two ships on an Athenian B.-F. vase of about 500 B.C. (*B.M. Vases*, B. 436), and possibly in the ship on an Etruscan B.-F. vase (*B.M. Vases*, B. 60), though this latter is of little value for the arrangement of the oars. None of these ships can be biremes, which are unknown to every writer before Cæsar. The silence of Thucydides, who gives a sort of history of shipbuilding, is most material.

The Praenestine 'bireme.' According to Assmann, this relief belongs to the time of Augustus; according to Torr, to about 50 A.D. It shews two superposed banks with a very small interval between them; perhaps it would be more correct to say it shews the arrangement The higher bank issues from the outside of, the lower from the under part of, the *παρεξίπρεστα*. The distance between the banks is too small for the accepted theory, to which it gives no support; but if it is in fact a bireme, then it may support Bauer's theory for *biremes of the early empire*. Whether it really is a bireme seems to me, I confess, very doubtful. Biremes were undoubtedly light and swift; but, allowing that in this relief, if to scale, the oars would be longer and the men smaller, it remains anything but a light or speedy-looking ship; compare it with the Isis-temple ships, for instance. Then it carries a *turris*. We do not know that a bireme never carried a tower, certainly; but we do not know that it did; I think the smallest ship referred to with a *turris* is Eudamus' quadrireme at Side (Livy 37, 24), and after all one can only argue from the facts that are known.

Figs. 5 and 6 in his article in *Ath. Mitth.* 17. Assmann claims to have refuted Pernice, (*Arch. Anz.* 1901, p. 98); and his point, that the Dipylon chariots shew one horse *beyond* and not *over* the other, is a fair one. But he does not (apparently) deal with the three things that seem conclusive, viz. :—(1) the supposed upper deck has no supports; (2) the supposed upper oars are cut off short on reaching the (supposed lower) deck, *i.e.*, fall on the other side of it; and (3) the steersman is lower than the supposed

upper rowers.

⁹⁷ It is well known that almost all beginners will try to draw, not what they see, but what they know to be there. A case exactly in point appears to me to be the idea of some savages, that a drawing in profile represents half a man only. This would meet Assmann's point about the chariots. It is easy to shew the further horse *beyond* the other, but very difficult thus to shew the further oarsmen.

The Palazzo Spada and Ludovisi reliefs.⁹⁸ These are Roman copies of the same Hellenistic original, of unknown date. The arrangement resembles that in Fig. 2, *ante*, and the original may have been a bireme; but it may just as well have had several men to an oar. And the two copies do not agree. If it was a bireme, then Luebeck's definition in Pauly-Wissowa is wrong, for its oars form one line in the water and not two.

Now as to the 'bireme' question generally. If the holes in the prow of Samothrace are portholes, and supposing that the Praenestine ship is not a biremis at all, but a large admiral-ship, as is possible—note the laurel-wreath—we get a breit-polyeres system in which two oars appear at unequal levels, a hepteres, *e.g.*, being rowed by three and four men to the oars respectively; again as at Venice.⁹⁹ This seems to me quite possible, and would explain the fact that every monument that we possess which shews or appears to shew any form of superposition (except the two ships at Naples, Trajan's column, and the Dipylon vases) never shews anything but two rows arranged thus; and we may perhaps imagine, founding ourselves on the Assyrian reliefs and the black-figure vases mentioned before, that such an arrangement of two rows has nothing whatever to do either with banks or ordines or the terms ending in *-ηρης*, but is merely an arrangement of old standing in the Eastern Mediterranean, applicable in many forms. As we possess very many references to triremes, quadriremes, and quinqueremes, and (omitting inscriptions of the Empire) very few indeed to biremes, to call nearly every monument a bireme is a historical absurdity. I would suggest that from early times there were two arrangements; in one the oars issued from the ship in a straight, in the other in a zigzag, line; from the former was developed the trireme; the latter, perhaps in abeyance in the 5th and 4th centuries, was again utilised, perhaps with modifications, for some of the larger polyereis of Hellenistic and Roman times. This seems at any rate worth consideration.¹⁰⁰ We have to explain Demetrius' hekkaidekerēs somehow and two oars of eight men apiece would be more feasible than one of sixteen¹⁰¹. As to what the zigzag arrangement precisely means, I have no theory; what is and is not mechanically possible in the way of alternation must be left to others to say. I merely note the lines on which it would

⁹⁸ Schreiber, *die Hellenistische Reliefbilder*, Pls. 10 and 23^a respectively. See the two together in *Dar.-Sagl. s. v. navis*.

⁹⁹ For such a hepteres at Venice, Fincati, p. 196. It does not however appear if the oars in the Venetian ship were at unequal levels.

¹⁰⁰ Though I do not accept Bauer's hypothesis of the larger polyereis, I thoroughly agree with his conclusion; '[Meiner Hypothese zufolge] ist es unmöglich, den Typus eines Schiffes nach der Zahl der auf einer Darstellung sichtbaren Ruderreihen zu bestimmen' (p. 463).

¹⁰¹ Nothing larger than a dekerēs is known to have gone into action; nor does it appear

that in mediaeval times more than ten men to an oar were ever known. It is possible that the performance of Demetrius' hekkaidekerēs, which so pleased Plutarch's authority, (*Dem.* 43 τὸ πᾶχος καὶ τὸ ἔργον ἀξιοθεατότερον τοῦ μεγέθους), was only a 'contractor's trial' with a picked crew and very favourable conditions. Yet Philadelphos' extraordinary fleet (*Ath.* 203d) cannot have been merely for shew; though the account may be exaggerated, as Beloch supposes. Livy's translation of ἑκκαίδεκήρης (ii. 82) seems to dispose of the otherwise attractive view that the higher terms were arbitrary and merely denoted so much extra tonnage.

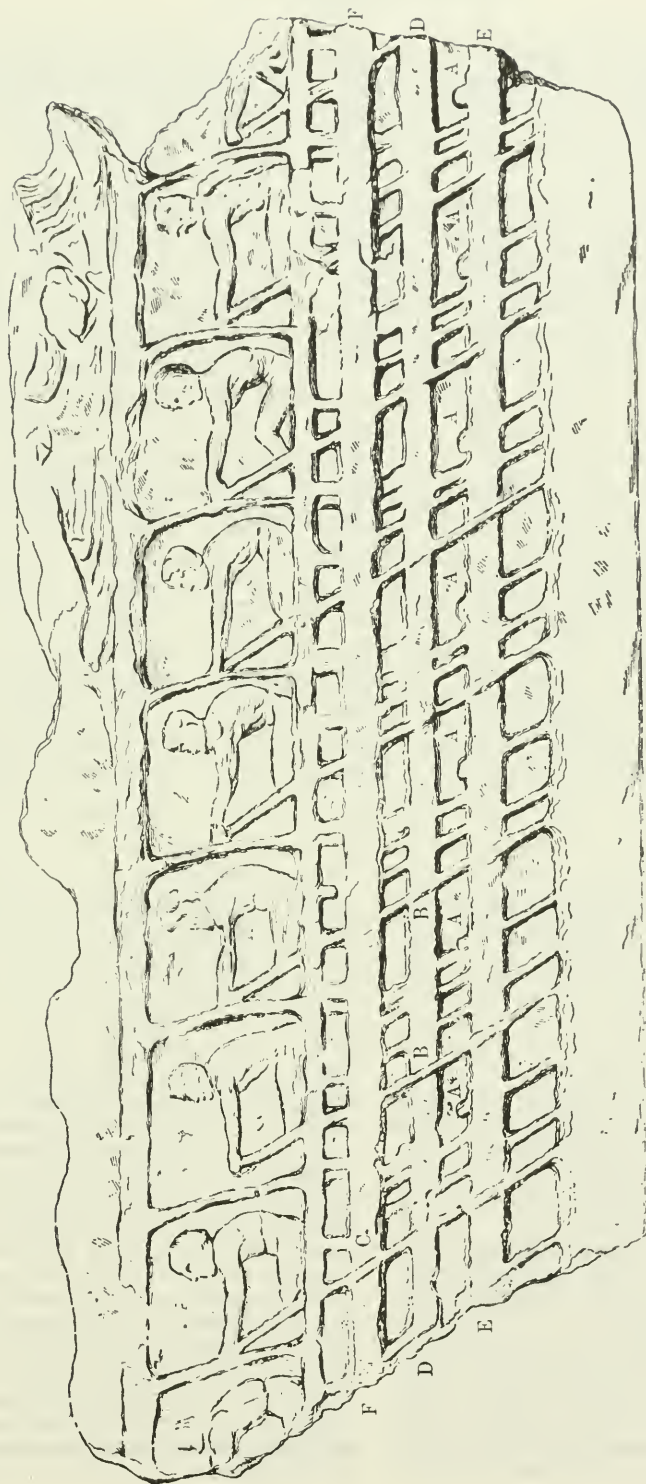


FIG. 3.—THE (SO-CALLED) LEXNORMANT RELIEF.

Reproduced by the kind permission of Mr. Torr from the plate in his 'Ancient Ships.' The lettering is mine.

appear that the 'bireme' problem must be solved, if due regard be paid to the evidence; and I rather think that the bireme is the key to the whole matter. For instance, I know of no evidence that the oars of any ship ever formed two distinct lines in the water, let alone more than two.^{101a}

There remains the so-called Lenormant relief, (Fig. 3), which has (unfortunately) caught the popular imagination as the one remaining representation of a trireme, largely owing no doubt to the inaccurate representations originally published. As soon as accurate plates were available, the idea that Y and Z were the oars of the two lower banks was seen to be untenable in its original form, which took both Y and Z across the timber EE and made AA the portholes of the lowest bank ZZ.¹⁰² Assmann accordingly, while still calling Y and Z the 'zugite' and 'thalamite' oars, has to place their ports below or under EE, (there is no sign of such ports in the relief itself), and to treat the design in effect as an abnormal trireme, with a very long 'thranite' bank and two stunted lower banks of almost equal length; and this explanation has been largely accepted.

If we take the relief as it now is, and if it is to be a trireme, no explanation but Assmann's is possible, as I think will appear from the subjoined letter¹⁰³ from Mr. R. Carr Bosanquet, who, in reply to some questions of mine, kindly examined the original for me, not knowing for what purpose I required it done. As to the matter of paint, or low relief, now lost, this is of course a double-edged weapon; and I submit that it is indisputable, either that we must take the relief as we find it, or that we must say that it is too worn to draw any deductions from, one way or the other. The *raised* lumps AA cannot of course be portholes, as Assmann saw.

Granted, however, that, if this relief is to be a trireme, Assmann's explanation is, on the facts before us, the only possible one, it is not easy to take it seriously. Why are we entitled to invent portholes, when the relief

^{101a} One of Weber's points is the single line in the water.

¹⁰² Even as late as 1896 Eins is said to have taken Y, and Haack (whose paper I have also not seen) Y and Z, across EE. Since this went to press, I see that the older view is still taken by Torr in *Dar.-Sagl*, and by Mr. E. Conybeare, *Triremes*, 1904.

¹⁰³ 'No sign of Y and Z crossing *over* the transverse pieces. The surface is much weathered and perished, and they may have done so in very low relief, now lost—or even in paint; no doubt the thing was made far more intelligible by the colouring (of which naturally no trace remains, but it must have been there). AAA are rounded knobs projecting vertically above the transverse strip E, but with their faces in the same plane as the face of E.' . . .

'I think Torr's drawing (which I have examined since looking at the stone) exaggerates the disturbed surface of the water; there is a raised lump where X meets the water in the case of oarsmen 1, 3, 4. No such lump in the case of Y and Z; but this must not be pressed.' All these points come out clearly on a cast in the Inner Temple Library, which also shews another point referred to by Mr. Carr Bosanquet, and not appearing in Fig. 3, *viz.*, that X seems to pass over F in the case of oarsmen 3, 6, and 8, as well as 1. The raised lump in the water round X, as compared with the smoothness where Y and Z meet it, is most distinct in this cast. The figure in Baumeister, reproduced by Luebeck, is from a cast in Berlin, but is (admittedly) much touched up and 'completed.'

does not shew them, and when there is no evidence, monumental or otherwise, for portholes¹⁰⁴ low down on the ship's side in a polyeres? How, if we are to invent them, can they be placed 10 inches, or even a foot,¹⁰⁵ above the normal waterline, where the least sea would prevent the oarsmen from clearing the water, and where a slight roll, or some change in the waterline,¹⁰⁶ would send them under water altogether? And how, if we do place them there, could the oars be got in and out quickly in the face of the enemy, as was done?¹⁰⁷ And why, if this be an Athenian trireme, has it no *παρεξειρεσία*, which is well attested by Thucydides for the fifth century and Polyænus for the fourth? And why are Y and Z to be distinguished from the precisely similar streak (not lettered) running parallel to the upper part of Y, which cannot by any possibility be an oar?

Neither are we justified in supposing this to be an abnormal trireme. There probably *was* another type, the trihemiolia;¹⁰⁸ but short of elucidating this relief as a trihemiolia, should anyone care to, we are bound to suppose that triremes, at one and the same time, were all of one type as regards the arrangement of the oars.¹⁰⁹ Fifth century: Thuc. 2, 93; Brasidas led over the Isthmus crews from the fleet of the allies, furnished by a number of different states; they all brought their oars, confident that these would fit the Megarian triremes at Nisaea; and they did. Fourth century: for Athens alone the lists are conclusive. For Athens and Sparta, excerpta Polyæni 40, 2, Iphicrates deceives the Laconisers of Chios by sailing in *κόσμῳ Λακωνικῷ*: had there been a difference in oarage he could not have hidden

¹⁰⁴ Even Mr. Torr's storehouse of quotations fails here. Herod. 5, 33 (which I shall come to presently) is certainly not such evidence. Pollux' *τρήματα* is quite satisfied by openings in the *παρεξειρεσία*; and none other appear on the Praenestine and Palazzo Spada ships, and perhaps I may add on the prow of Samothrace. (The portholes *are* however low on the Delphi ship, which is a moneres; but the gunwale is low also). *θαλαμῖα* is not connected with thalamite, technically, and does not mean the thalamite ports, but any port (Ar. *Ach.* 553) or any opening (Ar. *Peace*, 1232).

¹⁰⁵ Torr, p. 45, who takes AAA as the thalamite portholes, about one foot above the water, but points out the difficulty of squeezing in the rowers.

¹⁰⁶ See section *D* (*d*), and n. 75.

¹⁰⁷ Polyæn. 5, 22, 2. Note that the oars were not merely drawn inboard, but taken right out. The same manœuvre in Polyæn. 1, 47, 1; 3, 11, 3; excerpta Polyæni 57, 9. This is obviously dead against the portholes being covered with leather bags, the only alleged support for which is the Praenestine ship. There is no proof that the Athenian *ἀσκάματα*

were such; the only passage is Zonaras, who shews his ignorance by saying that the *ἀσκάματα* were fastened to the oars, the Athenian lists shewing that they were fastened to the trireme. Pollux 1, 83 τὸ πρὸς αὐτῷ τῷ σκαλμῷ δέρμα ἄσκιωμα is more likely to be correct. But I suppose that the notion that the most intelligent people in the world first 'honeycombed' the sides of their triremes with holes larger than a man's head, and then covered the holes with leather bags to keep out the water, will die very hard. Why some of the text book writers believe that the oars were put out from the inside, blades first, instead of having the handles passed in from outside, is to me a puzzle. It also seems to me to be a grave question whether oars could be rowed at all through the *sides* of a boat as light as a trireme without pulling her to pieces in a short time.

¹⁰⁸ See n. 11.

¹⁰⁹ I do not mean more than 'at the same time.' We cannot for instance prove that the arrangement of the fourth century was that of the first. See however under *F*. Some writers assume a new arrangement of oars to explain each monument.

it, but must have betrayed himself at once. So exc. Pol. 58, 3. And as a general maxim of warfare, the same in exc. Pol. 57, 1. We *do* hear of considerable differences between the models of different states, both as to triremes and quinqueremes, but always in one respect only, weight or stoutness; a difference of oarage is never hinted at.

But the real objection to Assmann's view is, that it demands (judging by eye) an upper bank of oars that shall be more than twice the length of the two lower banks. Such a ship is impossible; for if one thing be more certain than another, it is that oars of different lengths, where the difference bears more than a certain proportion to the length, cannot be rowed together, by one man to an oar, so as to be of any real use or turn out an efficient ship. That they might be rowed together in a certain way for a short time I do not deny; but the huge increase in the ratio of dead weight to power would at once put an end to all idea of speed or efficiency.¹¹⁰

The Lenormant relief is, in fact, a moneres, and a simple one, as Bauer has always said; ¹¹¹ and Y and Z are part of the hull.

F.

I trust I have now made probable the five propositions with which I started. The deductions from them—remembering that we have to do with reasonable probabilities only and not certainties—are, first, that a quinquereme of the last three centuries B.C. was a comparatively light galley of five men to an oar; secondly, that the ships from hexereis to dekereis may have been similar galleys of so many men to an oar, or may have been some other form of scaloccio galley, *c.g.*, one rowing two sets of oars in the arrangement; and thirdly, that Roman biremes may well have been nothing but double-banked monereis, perhaps modified a little; this last however is mere opinion.

It is however pretty clear on the evidence that the accepted theory

¹¹⁰ I am bound to refer to this controversy, on which so much has been written in Germany, and which has produced the greatest gem of the whole trireme-literature, the theory that the 'thalamites' may have taken 4 strokes and the 'zugites' 2 to the 'thranites' 1, *because* a pianist can play in three-time with one hand and four-time with the other. Given more than a certain proportionate difference in length, it is matter of mathematical demonstration, as well as practical knowledge, that the oars cannot be rowed together by one man to each oar so that each oar should do its best and each man pull his weight, *i.e.*, his own and his share of the ship's; and therefore each added bank after the first means a relative loss in power, owing to the

disproportionate increase in dead weight. Schmidt here *almost* takes up the position that, if practical oarsmanship forbids his deductions, so much the worse for practical oarsmanship: the 'thranites' had '*erheblich* längere Riemen. . . . Um diesen Schluss kommen wir nun einmal nicht herum, wir mögen uns drehen und wenden, wie wir wollen. Die namhaft *verschieden langen* Riemen, also auch *alle ihre Konsequenzen*, sind feststehende Thatsache' (p. 17; italics mine). Once more, whatever thranite means, there is no evidence of any sort that the thranite oars were *much* longer than the others.

¹¹¹ Bauer remained of the same opinion after examining the original; see his review of Schmidt in *Neue Phil. Rundschau*, 1900 p. 301.

cannot apply to any of the above; but the question of the trireme, Greek and Roman, and of the quadriremes and quinqueremes of the fourth century, is still open.

Herod. 7, 36: Xerxes' bridge over the Hellespont was laid on triremes and pentekontors. They were therefore of approximately equal height; and this seems to me very strong against the accepted theory, as regards Phœnician and Ionian triremes of 480 B.C.

Assuming the similar low elevation of an Athenian trireme, which is also a necessary consequence of its shallow draught, there remain only two theories, those of Bauer and Fincati respectively. To adopt Bauer's, one has to say, first, that the Praenestine ship is a bireme, and, secondly, that one can argue from a Roman bireme of the time of Octavian to a Greek trireme of the time of Pericles. Both these views are feasible enough, and I think therefore that Bauer's theory must remain a possible one. But for my part I do feel a great difficulty in arguing from a given monument to a ship of four centuries earlier. It is a question of individual opinion, no doubt; a rowing galley has only limited possibilities of development, and the great pace at which ancient fleets were built, indubitable even if exaggerated in detail, may well point to stereotyped models; but if I am right as to biremes not being in use till the first century B.C., I do not feel that they can have much bearing on the Athenian trireme. If this should be correct, the direct evidence for Bauer's view of the Athenian trireme has gone. Moreover I do not think Bauer claims that his view will explain the fourth century quadriremes and quinqueremes, which must be explained; and it may be that Fincati's will.¹¹²

Was a trireme then in the nature of a zenzile galley, with three men on a bench?

Galen, *de usu part.* 1, 24. Why are the fingers of different lengths and the middle one the longest? In order that when they close round an object the ends may come equal. So in triremes¹¹³ the ends of the oars all fall even (*i.e.*, make one line in the water) though the oars are not of equal length; for there too (*i.e.*, in the trireme as well as the hand) the μέσαι are made the longest (note that he refers to the *oars* and not only to the inboard portions) *for the same reason*. These last words can only mean 'in order that the ends of the oars may form one straight line like the ends of the fingers.' Now if any oars were the longest, considered as a group, it was the thranite oars,

¹¹² Fincati seems clear that no zenzile galleys larger than triremes were in use at Venice; but it is generally asserted, on Pantera's authority, that quinqueremes a zenzile were used. In Pantera's time the zenzile galley was only a memory. A thing might however be feasible with the shorter Athenian oars that was not so with the Venetian. How many difficulties would be avoided if one could only agree with Beloch (*Gr. Gesch.* 2, 470) that the

Athenian lists do not really prove that the oars of a trireme were used for a quadrireme.

¹¹³ καθάπερ οἶμαι κἂν ταῖς τριήρεσι τὰ πέρατα τῶν κωπῶν εἰς ἴσον ἐξικνεῖται, καίτοι γ' οὐκ ἴσων ἀπάντων ὄντων. καὶ γὰρ οὖν καθεὶ τὰς μέσας μεγίστας ἀπεργάζονται διὰ τὴν αὐτὴν αἰτίαν.—πέρατα cannot of course refer to the *handles*, which did not, and could not, come εἰς ἴσον on any conceivable theory, except Graser's.

and not those amidships (zugite). μέσαι then is not zugite (probably if he had meant zugite he would have said zugite); and the μέσαι had¹¹⁴ to be longest so as to get all the ends level. μέσαι then are the oars of the horizontal row or ordo nearest to the middle line of the ship drawn from stem to stern, and the trireme known to Galen was a breit-polyeres, probably in the nature of a zenzile galley;¹¹⁵ for the oars, if the ordines were distinguished by their position relative to the long axis of the ship, must have been all on a level, or thereabouts.

Now arises the question, is Galen an independent authority or is he using or referring to Aristotle (*Mech.* 4)?¹¹⁶ First, let us assume that he is using Aristotle.

As the text stands, Aristotle begins by saying (1) that the μεσόνεοι do most work; (2) that the fulcrum of the oar-lever is the thole. (2) is of course wrong in fact; if then (1) was right in fact, the μεσόνεοι must in fact have had the longest oars; and, if the passage is to agree with Galen, as explained above, the μεσόνεοι must also have had more oar inboard than the others, and so Aristotle says: ἐν μέσῃ δὲ τῇ νηὶ πλείστον τῆς κώπης ἐντὸς ἐστίν. So far all is plain sailing. Then come the following words, explaining μέση; καὶ γὰρ ἡ ναῦς ταύτῃ εὐρυτάτῃ ἐστίν, ὥστε πλείον ἐπ' ἀμφοτέρα ἐνδέχεσθαι μέρος τῆς κώπης ἐκατέρου τοίχου ἐντὸς εἶναι τῆς νεώς, i.e., μέση means amidships, and the whole passage, as a source for Galen, becomes nonsense. The rest of the chapter (allowing for the mistake as to the fulcrum) is excellent sense and suits Galen very well. If then Galen was using this chapter, he was using a text in which the words καὶ γὰρ ἡ ναῦς, etc., did not occur, and I may therefore strike out these words as a gloss. But perhaps these words do suit Galen, and it is only my explanation of Galen that is wrong? This, I think, is forbidden by Galen's words, διὰ τὴν αὐτὴν αἰτίαν.

Suppose now that Galen was not using or referring to Aristotle. He is then an independent authority; but one must attempt to construe the more important Aristotle on the basis of the words καὶ γὰρ ἡ ναῦς, etc., forming part of the text. The passage refers to the inboard length of the oars ἐν μέσῃ τῇ νηὶ. νηὶ here is either confined to a moneres or not. If it is, as is often assumed, then the passage construes well enough, but has no bearing whatever on the accepted theory, or my theory, or any other theory. But if νηὶ refers to, or includes, a trireme (as it obviously must), then, (if the words καὶ γὰρ ἡ ναῦς, etc., be included) μέση means amidships, μεσόνεοι mean what I call zugites, and my zugites do more work than my thranites: and as this

¹¹⁴ This (the word αἰτία) is conclusive against μέσαι here meaning amidships, whatever theory we adopt as to the trireme; for the oars amidships would not have to be the longest to make the ends come level; indeed if they were the longest the ends would not come level. It seems equally conclusive against Conybeare's view that μέσαι means the middle of three superposed banks.

¹¹⁵ The explanation is substantially Fincati's, though he does not apply it to Galen. He says they had two zenzile triremes at Venice, in one of which the oars formed one even line in the water. To the same effect is Aristot. *de part. anim.* 4, 10—the handle of the κώπη μεσόνεως traverses a greater space.

¹¹⁶ The chapter is too long to cite in a note.

will not do, the passage must be taken to shew that the term 'zugites' means a row or ordo, and not a squad; this is of course against me.¹¹⁷ Assuming then for a moment that it *does* shew that the zugites were an ordo (and it does not matter now whether we take the accepted theory, or Bauer's, or Fincati's, they all agreeing that the zugites were an ordo), we land in a very grave difficulty over the *παρεξειρεσία*. This must of course have formed a straight line parallel (more or less) to the long axis of the ship, and not a curved line following the ship's side, one object being to give the oars all along approximately equal leverage throughout each ordo;¹¹⁸ and if so, the oars amidships of any ordo could not be longer inboard (*i.e.*, from the *σκαλμός*) than the others of the same ordo in any ship, such as a trireme, which carried a *παρεξειρεσία*, the *σκαλμοί* being of course in the *παρεξειρεσία*. If then this is well founded, *μέση* cannot mean amidships, and therefore *μεσόνεοι* must have the same meaning as in Galen,^{118a} and I may omit the words *καὶ γὰρ ἡ ναῦς*, etc., as a gloss added by some one who was ignorant of the *παρεξειρεσία* and was thinking of a ship with a curved side. If this be done, Aristotle means what Galen means. I do not then myself think that Aristotle is against me: but I hope I have stated the difficulty fairly.

I need only refer to two other passages. Polyæn. 3, 11, 7; Chabrias, training some new men, took out the triremes' oars, and placing on the beach great logs (*ξύλα μακρά*), so that the men sat one by one (*ὥστε ἐφ' ἓνα καθῆσθαι*), thus taught them. I think the natural meaning is that in the trireme they did not sit *ἐφ' ἓνα* (else why be at pains to mention that they so sat on the beach?), but *ἐπὶ* some other number, *i.e.*, *ἐπὶ τρεῖς*, three on a bench; but I cannot press this. Herod. 5, 33. If a trireme was a zenzile galley, with the three oars issuing side by side from one opening, we can explain what Skylax' head was put through. The idea of a porthole for one oar larger than a man's head is not only unlikely in itself,^{118b} but flatly contradicted by every published monument known to me that shews portholes: and Herodotus does *not* speak of the man's head as being near the water, as many seem to assume.

The evidence then, for what it is worth, though terribly scanty and unsatisfactory, does lend colour to the idea that, as regards triremes, Fincati is, in the main outlines, right:¹¹⁹ and we come round once more to the

¹¹⁷ The argument under *B*, *C*, *D*, and *E* is independent of the meaning of 'zugite.'

¹¹⁸ This was the object of the telaro in the mediaeval galley, and of the first importance, as Jurien de la Gravière points out. It gave the boat, seen from above, the look of a parallelogram with two projecting ends; see the frontispiece and pl. 7 in Furtenbach, also the rearmost trireme in Fig. 1, *ante*. If I am right, then the *παρεξειρεσία* itself, though possibly inclining (as from stern to bow) somewhat

toward the long axis of the ship, must have been somewhat broader at the bow end than amidships; and this agrees well with Thuc. 4, 12, where Brasidas falls wounded and swooning on to the *παρεξειρεσία* and does not roll off.

^{118a} I take *μεσόνεοι* to be a technical term; something like *vogue-avant*.

^{118b} Even Assmann now doubts it; *Jarhb.* 1905, p. 89.

¹¹⁹ Fincati could at least claim that his boat would go: according to a writer in the

conclusion to which we have been tending throughout this paper, that the course of development in the Aegean was very similar to that which took place later in the Adriatic.¹²⁰ Differences in detail, of course, there must have been; ¹²¹ but the conclusion as a whole does not seem to be in conflict with common sense.

One thing however seems to me to be abundantly clear: no evidence has yet been put forward that compels, or even seriously invites, us to believe in the accepted theory: and it is to be remembered that the burden of proof is on those who uphold that theory.

W. W. TARN.

APPENDIX.

I have received from Mr. Cecil Torr a number of critical notes on both parts of the above article, and by the courtesy of Mr. Torr and of the editors of this Journal it has been arranged that the substance of them shall be here published, with my replies. Mr. Torr's remarks are given verbatim as far as possible, in inverted commas.

- p. 139. If the rowers were in three divisions, 'how did they get their names? I conceive that the thalamites sat in the thalamos, or hold; the zugites sat on the zuga, or beams, which formed the upper limit of the hold; and the thranites sat on thrani, or thranyes, which were seats above the beams.'—There is I think no evidence for these thrani; and as to thranites, I should adopt Prof. Ridgeway's suggestion (*Class. Rev.* 1895, p. 166), and derive the term from *θρήνην*, the elevated step or platform at the *stern* on which stood the helmsman. As to thalamites, when an open boat first began to be partly decked, there would be a thalamos or cabin in the *bow*; hence the name. In Timaeos ap. Ath. 2, 37d *θάλαμοι* are the cabins of a merchant ship; and I know of no passage where the word simply means 'hold.' Pollux 1, 87 says that the *ἔδαφος τῆς νέως* was called *κύτος καὶ γάστρα καὶ ἀμφιμήτριον*, and that in the part where the thalamites sat it was also called *θάλαμος*.

Academy, 1883 p. 219, it attained the great speed of 9 miles an hour, *i.e.*, nearly three-quarters of the pace of an average University crew from Putney to Mortlake. Unfortunately I have never seen any details of what the boat exactly was.

¹²⁰ So far as we have gone, there has been nothing to lead one to distinguish the Roman trireme from the Greek. It is however just possible that in Polyb. 1, 20, 15, we have a reference to a trireme a *sealoccio*; the Romans, he says, built their whole fleet (quinqueremes and triremes) to a Carthaginian model; and if, as suggested in this paper, the quinqueremes had 5 men to an oar, these Roman triremes *may* have had 3. This would only accord still further with what happened at Venice, where

triremes on both systems are said to have been built. But even were this so, the *sealoccio* trireme (if I am right as to Galen's meaning) was not the one that survived in the Aegean. At Venice, the galleys a *sealoccio* killed the trireme a *zenzile*.

¹²¹ The length of the oars, for instance. It might be attractive guesswork that the *beneli* rose a little from the ship's side inboard and that the oars had separate potholes very close together; this would much resemble Bauer's theory, I think, and might be a useful subject for experiment. It has been suggested by Mr. Cook, whose citation of the *τρίσκαλμοι νέες* of Aesch. *Pers.*, 679, for the *zenzile* trireme is most happy, as a reference to Fig. 2 (*ante*) will shew.

pp. 140, 141. Polyæn. 5, 43 and 3, 11, 14; Polyb. 16, 3. 'The Athenian triremes had sixty-two oars in the thranite (or highest) bank, fifty-four oars in the zugite (or middle) bank, and fifty-four in the thalamite (or lowest) bank. Consequently, the thranite bank of oars was longer than either the zugite or the thalamite bank. And this would naturally be the case, for all three banks would start from abaft the catheads, and the thranite (or highest) bank could extend further back toward the stern than the other two banks, owing to the sharpness of the run in ancient ships.' The three passages in question refer 'to the part of the stern to which the thranite bank extended.'—The numbers 62, 54, and 54, are the highest of various numbers given for triremes by the Athenian lists; but it does not follow that all these oars were in use at once. However, if Mr. Torr could shew that Calliades' ship was an Athenian trireme, and that a trireme had three superposed banks, his explanation might do for Polyæn. 5, 43. It cannot apply to the *trihemiolia* in Polyb. 16, 3, which was rammed *κατὰ μέσον τὸ κύτος*; and Polyæn. 3, 11, 14 depends on the meaning of *παρεξαιρεσία*; see post.

p. 140. 'In rendering Polyæn. 5, 43, the word *πηδάλιον* is taken three times to mean "steerage" and once to mean "stern." It really means "steering-oar." The phrase *τὸ πηδάλιον ἔσχαζε* is translated "kept using his steerage." It means "kept lifting his steering-oar out of the water;" i.e. ceasing to use it for steering.'—'Stern' does not occur in my rendering of Polyænus, but in my own account of what happened, and is not meant for a translation of *πηδάλιον*. There is no instance, I think, of *σχάζω* meaning 'to lift.' It means 'to cut'; and when it is used in the phrase *κώπην σχίζειν*, 'to stop rowing,' the meaning is that the oar is (naturally) dropped flat on the water, so that the edge of the blade cuts through the surface; this was known to the Scholiast on *Clouds* 107 *σχάσαι γὰρ δεῖ καὶ ὥσπερ διαστεῖλαι καὶ διασχίσαι τὸ ὕδωρ τὴν κώπην*, though he is mistaken in adding *ἐρέσσονσαν*. From this meaning again are derived two others (*ἀπὸ μεταφορᾶς τῶν ἐρεσσόντων*); simply 'to stop,' and simply 'to drop' (Xen. *Kyr.* 3, 5). *ἔσχαζε τὸ πηδάλιον* is then 'he kept dropping his steering-oar into the water,' i.e. making use of it; and this is the only rendering of the passage that makes sense, for Calliades must have turned his own ship now to one side and now to the other in order to avoid the enemy *καθ' ὁπότερον ἂν ἐμβάλλειν μέλλοι*. No doubt it was a technical term.

p. 141. Note 10. "The new steering-oars were through the *παρεξαιρεσία*: therefore, the old ones were not." This does not follow. Polyænus says *διὰ τῆς παρεξαιρεσίας κατὰ τὰς θρανιτίδας κώπας*. He is specifying a point in the *παρεξαιρεσία* further forward than the position of the old steering-oars, namely, the point to which the thranite oars extended. Then as to *παρεξαιρεσία* in *Peripl. Pont. Eur.* 2, "the reference must be to a *higher* point, not a *different* point," i.e. from *κατὰ τὰς κώπας*. Of course, it is a *higher* point, because the ships were higher out of water at the ends (*παραξαιρεσία*) than in the middle (*κατὰ τὰς κώπας*). But, unless it is a different point, the passage is meaningless. Then, Thucydides vii. 34 is made to mean exactly the reverse of what it does mean. The ships met the others bow to bow (*ἀντίπρῳροι*) and were damaged in the parts next the bow (*παρεξαιρεσία*). It is unfair to Thucydides to make him say that the ships met bow to bow and thereby damaged themselves amidships. "But the absolutely decisive passage is Polyænus, iii. 11, 13. Chabrias stretches skins over the *παρεξαιρεσία* of *each side* of the ship and nails them to the deck above, thus making a *φράγμα* which prevented the waves washing in and the oarsmen looking out." If the sea had been abeam, he would only have put the skins along the windward side of the ship. As he put them *on each side* of the ship, it must have been a head sea or a following sea; and, as one of his objects was to prevent the rowers seeing the approaching waves, it must have been a following sea, for the rowers faced aft. In fact, there was a following sea in which his ship was likely to be pooped, and he protected her at the stern (*παρεξαιρεσία*).—I think there is no passage in which *παρεξαιρεσία* must mean

stern or bow, and cannot mean an outrigger or some analogous structure. I grant that *Peripl. Pont. Eur.* 3 can be taken either way; and that Polyæn. 3, 11, 14 is not quite conclusive; though if *παρεξειρεσία* be the stern, why is it mentioned at all? And how is *διά* to be construed? Did Chabrias cut a hole in the timbers of the poop? (*Anc. Ships* fig. 36 illustrates *how* he put out his new steering-oars, I think.) Thuc. 7, 34 states that no Athenian ship sank, but seven became *ἄπλοι, ἀναρράγῃσαι τὰς παρεξειρεσίας*. It is incredible that none sank if their bows were torn open. Two triremes ramming bow to bow would rarely meet stempost to stempost with accuracy; the stems would slide each past the other, and carry away the forepart of the opponents' outrigger, which extended most of the ship's length. (I said nothing about 'amidships.') This was why the Syracusans strengthened their *ἐπωτίδες*, i.e. the forward ends of the outriggers. Cf. the distinction between *ἀναρρήξαι τὴν παρεξειρεσίαν* and *ἀναρρήξαι τὴν πρῶραν* in Pollux 1, 124. Polyæn. 3, 11, 13 is decisive that the *παρεξειρεσία* was something extending along each side of the ship so far as the rowers extended. Chabrias stretched skins *ὑπὲρ τὴν παρεξειρεσίαν ἐκατέρου τοίχου* (which in silver Greek can only, I submit, mean the *παρεξειρεσία* of each side of the ship), and nailing them to the deck above made a *φράγμα πρὸς τὰς παρεξειρεσίας* (plural), which (among other things) prevented the men getting wet and prevented them seeing the waves, *οὐχ ὁρῶντες διὰ τὴν τοῦ φράγματος πρόσθεσιν*. No arrangement on the stern could possibly have this effect, apart from the reference to cataphracts in *φράγμα*; and Chabrias could not possibly have carried out his idea *ad sea*, with a crew so nervous that he was afraid of their upsetting the boat. The old interpretation of *παρεξειρεσία* as stern or bow is in fact a guess of the scholiast on Thucydides from the look of the word, τὸ παρὲξ τῆς εἰρεσίας.

Mr. Torr then refers to Dr. Assmann's view of the *παρεξειρεσία*, which I have adopted, as being based on a misinterpretation of the prow of Samothrace, the projections on which (as in *Ancient Ships*) he calls cat-heads, comparing a coin of Cios (*Anc. Ships* fig. 23).—I have nothing to add to what I have said on this monument. But if one can prove the outrigger from the texts, it lends much support to Dr. Assmann's view that what the monument shews is an outrigger.

pp. 142, 143. 'I am not concerned with evidence of class (2). But Pollux 1, 87, shews by his mention of *θάλαμος, ζυγά, and κατίστρομα* that he supposed the banks of rowers to be superposed.'—The most that can be claimed for Pollux is, that he can be read to suit either theory, like many other passages. But he does not refer to triremes only; he is speaking generally; and for three centuries the standard warship had been the quinquereme. As to there being three classes *only*, Mr. Torr says 'The men in the highest bank of the tesserakonteres were called *thranites*, as was to be expected; but nothing whatever is known about the names for the men in the other banks in the tesserakonteres, or any other ships of higher rank than triremes.'—One cannot *disprove* this; but we have no right to confine Pollux 1, 87 and 119 to triremes, and most recent writers have taken the simple view, that in all ships there were only three classes. It is a pity that the text of Polyb. 26, 7, 10 is corrupt.

pp. 143, 144. 'The forms "*τετρακίρκος* and so forth" may not occur, but their equivalents do. Aelius Aristides, *Rhodiaca* p. 341 *δικρότους καὶ τρικρότους καὶ εἰς ἑπτὰ καὶ εἰς ἑννέα στοίχους*.'—*ἑπτὰ στοίχους* is septem ordines, which we know (from Livy and Eutropius) would be the translation of *ἑπτήρης*; it is not *ἑπτακίρκος*. In the second century A.D. *δίκροτοι* were probably biremes; and *τρικρότους* is used here for 'triremes' because the writer has just used *τριήρεις* for 'warships.' A professional rhetorician like Aristides could not write *τριήρεις ὑπῆρχεν ἰδεῖν, διήρεις καὶ τριήρεις καὶ εἰς ἑπτήρεις καὶ ἑννήρεις*, which is what he *means*; he has done all he can to vary the *sound*, that is all.

pp. 144, 145. App. *Mith.* 12. 'There is nothing there to shew that the term *δίκροτος*

- excludes hemiolia. I conceive that *δίκροτος* includes hemiolia as well as the true bireme and the bireme of the Liburnian type. Appian's statement is that the pirates gave up using myoparones, and took to using *δίκροτοι* of other sorts besides the hemioliai, and also triremes.' Then follows the explanation of hemiolia as a two banked ship given in *Ancient Ships*, for which there is no evidence.—As this is important, I quote Appian (Meudelssohn). *πειρατῆς . . . οἱ τὸ μὲν πρῶτον ὀλίγοις σκύφεσι καὶ μικροῖς οἷα λησταὶ περιπλέοντες ἐλίπον, ὥς δὲ ὁ πόλεμος ἐμῆκνεν, πλείονες ἐγίγνοντο καὶ ναυσὶ μεγάλας ἐπέπλεον. . . ἀντὶ τῆς γῆς ἐκαρπούντο τὴν θάλασσαν, μονοπάρωσι πρῶτον καὶ ἡμιολίαις, εἴτα δίκροτοις καὶ τριήρεσι κατὰ μέρη περιπλέοντες.* To the man who wrote this, *ἡμιολία* and *δίκροτος* are mutually exclusive terms; and Mr. Torr's explanation is forbidden by the Greek.
- pp. 144, 145. Arr. *Anab.* 6, 5, 2. 'The context shews that these *δίκροτοι* were hemioliai. By making the statement refer to triakontors, instead of hemioliai, the author has to shew that *κάτω* does not mean lower; and he does not seem to me to shew it.'—Once it is established from Appian that the hemiolia is not *δίκροτος*, the meaning of *κάτω* follows with almost mathematical precision.
- p. 146. Mr. Torr claims *διήρης* and *δίκροτος* in Pollux 1, 82 as synonyms. It is not very important; but no doubt by the second century A.D. they were practically synonyms.
- p. 150. App. *b.c.* 4, 85. 'Some ships got into the whirlpool at Scylla, and the crews were upset, not being used to it. It seems forcing the translation to say that the men were knocked off their legs rather than off their seats.'—I submit that *οὔτε ἐστῶτες βεβίως* cannot possibly refer to sitting.
- p. 154. 'Oros. 6, 19 is quoted as if he were contrasting Antony's dekereis with other dekereis, whereas he is contrasting them with the ships in Octavian's fleet which were all smaller than dekereis.'—Very possibly this is right; but it does not affect the other evidence for the size of Antony's ships. They must have resembled galeasses.
- Note 80. 'See *Anc. Ships* p. 57, n. 131' which states that *ζυγόν* in *Agam.* 1618 is some bench at the stern.
- p. 205. 'Florus ii. 21 (iv. 11) uses *remorum* and *remigum* indifferently, because there was one man to one oar.'
- p. 206. 'The Trajan column *trireme* cannot be ignored. It is not true that the oars "are just plastered on anyhow." They are clearly intended to be arranged in *quincunx* . . . which is the natural developement of the zigzag . . . that you mention in the biremes.'—But what the monument *shews* is not a quincunx at all, but . . . ; and is not that 'anyhow'?
- p. 207. The prow of Samothrace. 'Your argument for the hepteres, which you develop at so much length, does not seem to have very much foundation. How can one assume that it has anything to do with Demetrius' victory at Salamis? And why should Nike be travelling about on one of Demetrius' ships rather than her own? Her ship was a familiar thing before that date; see *Revue Arch.* 26 (1895) p. 161.'—Mr. Torr's article in the *Revue Arch.* gives two figures of Nike, one on, and one hovering over, the prow of a ship; but there is nothing to suggest that the ship is Nike's own ship. Is there any other evidence? As to the Nike of Samothrace, Demetrius' well-known coins shew that she was set up to commemorate some victory of his by sea, and we know of no other but Salamis; had there been any other of importance, Plutarch would hardly have passed it over.
- Note 94. 'I conceive that these lembi were narrow enough to have the oars sculled in pairs.'—No doubt biremis *can* mean a sculling boat; but had Philip two complete fleets of lembi? Or did he put sculling boats into line against the Rhodian quinqueremes at Chios?

- p. 209. The Dipylon ship *J.H.S.* 1899, Pl. 8. 'I doubt if it is a bireme. I am in favour of its being a ship of a single bank with *περίνεω* oars rowed from the *καρίστραμα*.' —I by no means exclude the idea that (say) a state ship might have been thus rowed; I believe there is a case at Venice, and possibly Antigonos' *τριάμμενος* was something of the kind. But in the case of this Dipylon ship the explanation does not seem to meet any of the three difficulties given in n. 96.
- p. 209. As to biremes being unknown to every writer before Caesar. 'Damastes (*apud* Plin. vii. 56 (57), 207) attributes the invention of biremes to the Erythraeans; and Damastes was a contemporary of Herodotus. Also in the catalogue of the ships *Il.* 2, 509, 510, there is a pretty clear allusion to biremes.' —The allusion in the *Iliad* is merely to ships with 120 men each. As to Pliny. It is not a case of Damastes *apud* Plinium, but of an assertion of Pliny's own, even supposing Damastes of Sigennu to be meant; and Pliny's list is quite untrustworthy. 'Biremem Damastes Erythraeos fecisse: triremem Thucydides Aminoclem Corinthium (our Thucydides says nothing of the sort, see 1, 13, 2; it is Pliny's own interpretation of him); quinqueremem Mnesigiton Salaminios (directly contradicted by the circumstantial account in Diodorus); ab ea (hexeres) ad decemremem Mnesigiton Alexandrum Magnum (almost certainly untrue, see note 51). In the face of this kind of thing, Pliny's statement as to Damastes is of very slight value. No doubt a bireme was experimented with before a trireme; my point is that it never came into use *at all* in early times, while Mr. Torr thinks it did, and was driven out by the trireme. Then why no reference to it?
- p. 209. 'If Sennacherib's ships are not biremes, what are they?' —I do not know. But if the pentekontor was really not invented till 704 B.C., they cannot be *long* ships at all. I think they are *round* ships (see figs. 10 and 11 in *Anc. Ships*) beginning to be adapted for fighting; two have rams, one has none.

Mr. Torr does not comment on the difficulty I have felt and expressed over the bireme question generally.

'Lenormant relief. I have no doubt at all about the accuracy of what you call the older view. "The *raised* lumps A A cannot of course be portholes." They presumably are portholes with *ἀσκόματα*. "And Y and Z are part of the hull." Similar reasoning would make X part of the hull; which it certainly is not. Why should not Y and Z cross E E (the lower waling piece) just as much as X crosses D D and E E (the two waling pieces) and F F (the gunwale)? If the relief disproves one, it disproves the other.

'I presume you admit that X are oars rowed against tholes on the gunwale F F, and that D D and E E are the waling pieces. Then one gets the ports (with *ἀσκόματα*) of the third bank just where one expects to find them, namely between the two waling pieces and vertically below the tholes of the first bank. One would expect to find the ports of the second bank between the upper waling piece and the gunwale. The difficulty of course is that the oars of the second bank (Y) seem to go right up to the lower side of the gunwale. Now there is a double set of supports under the gunwale, one running down to the upper waling piece and the other running down to the lower waling piece. One explanation is that the sculptor was rather careless, and continued the oars (Y) as far as the gunwale in the same way as these supports. Another explanation is that these supports imply that the gunwale projected a little way over the side of the ship, and thus hid the portholes.

'I think my diagram, D. and S., fig. 5275, helps one to understand this relief.' —I submit that this is reconstruction, not explanation; precisely as fig. 5275 in Dar.-Sagl. is. The monument shews that X crosses D D, E E, and F F, and does not shew that Y and Z cross E E: that is the point. One cannot reconstruct a relief on the footing that it has to shew three banks, and then use it as evidence that there *were* three banks.

Note 107. 'Polyaen. 5, 22, 2 is not conclusive that the oars could be got out quickly. Diotimos would begin getting his oars out as soon as the enemy saw his hulls, say five miles off. The stratagem would answer only so long as his ships were hull down. But the passage seems to me to shew that the oars could not have been passed in from the outside, as you suggest. Pollux, I think, is wrong; the thing that he mentions was called *τροπός* or *τροπωτήρ* and *κωπητήρ*, not *ἄσκωμα*.—Diotimos must have let the enemy come close up, or he could have got back to harbour; but I have omitted the words 'is conclusive' from the note. But the *practical* difficulty of getting out the oars at all, whether from inside or otherwise, in a trireme arranged on the accepted theory is to my mind prohibitive. Whether Pollux here be right or wrong (I think he is right), there is no real evidence for the current view of the *ἄσκωμα*. Its use was to lessen friction.

- n. 107. 'The latter part of this note seems to rest on a misconception. The portholes did not serve as rowlocks. The oars were rowed against tholes.'—By all means. My difficulty, *i.e.* the strain on the ship's timbers, remains (she was very lightly built); and I should like an expert opinion. I am thinking of the way a racing eight strains in spite of every precaution.
- p. 215. Herod 7, 36. 'Probably the bridge had longer supports where the supports rested on pentekontors than where they rested on triremes.'—Perhaps. The bridge was laid on great cables. No doubt it may be possible to get round the question of *height* as regards a trireme; it is with the quinquereme that it becomes so formidable.
- p. 215. Galen. Mr. Torr is inclined to think that he is referring to one *tier* of the trireme's oars only and also to the aspect of the oars inside the ship. The word *αἰρία* I think forbids this, as I have shewn (n. 114). It also assumes that there *were* tiers, which is rather the point at issue.
- p. 216. As to Aristotle. I do not reproduce Mr. Torr's criticism because (given his premisses) everyone will agree. If there was no such thing as an outrigger, and if Galen is not using Aristotle, (these are his premisses), then *μεσόνευι* are the men amid-ships, and Aristotle is against my view under A. But if either of these premisses be false, my argument holds. Anyhow Mr. Torr does not claim that Aristotle supports the theory of superposed banks, for he says 'Aristotle is stating a general proposition, *i.e.* he refers to any tier of oars (it does not matter whether the ship had one or more).'
- p. 217. Polyaen. 3, 11, 7 *ἐφ' ἑνα*. 'I take this to mean that each pair of rowers (port and starboard) sat on the same piece of timber, instead of sitting on separate seats. (cf. Leo, *Tactica* 8 and Ap. Rhod. 1, 395, 396 quoted in *Anc. Ships*, notes 46 and 110.)—Neither of these passages refers to triremes, and I doubt if the above explains *ἐφ' ἑνα*; but I have said that I cannot press the passage.

Finally, Mr. Torr considers it hazardous to say that something which existed in the mediaeval type existed in the ancient type unless one can shew that it existed also in the intermediate or Byzantine type. But I claim neither continuity of tradition nor identity; only analogy.

Mr. Torr sums up as follows :—

'As to your propositions.

A. I do not see that you have any evidence at all for the assertion, "thranites astern, zugites amidships, thalamites in the bows." Your evidence is only that the thranites were furthest astern. And there is quite another explanation of that, namely, that the thranite bank, which had sixty-two oars, reached further aft than the zugite and thalamite banks, which had only fifty-four.

B. To establish this translation of the terms *τρίκροτος*, etc., you would have to show that *δίκροτος* and *ἡμιολία* are mutually exclusive in App. *Mith.* 92, and that *κάτω* does not mean *lower* in Arr. *Anab.* vi. 5, 2.

C. Of course, there is a danger in generalizing from a limited number of instances ; but, I think, people were aware of that already.

D. I cannot find anything in your paper to support D (1), and hardly anything in support of D (2). Of course, D (2) is really a question for a naval architect ; and I fancy he would decline to express an opinion without more *data* than can be given him.

E. This is supposed to be dealt with in Part II., but I do not see that you have really tackled the question.'

W. W. TARN.

ON THE DATING OF THE FAYUM PORTRAITS.

[PLATE XIII.]

WHEN the mummy-portraits from Rubayyat and Hawara were first brought to Europe, amid the general interest which they aroused there was a wide diversity of opinion as to their age. Georg Ebers, who had an enthusiastic admiration for them, tried hard to prove that the series began in the second century B.C. and that the best specimens belonged to the Ptolemaic period.¹ Th. Schreiber may be mentioned as another distinguished authority who took the same view.² On the other hand many archaeologists maintained that the portraits were all Roman work, dating for the most part from the second century A.D. Mr. Petrie in particular brought forward definite evidence to show that they range from about 130 A.D. to about 250 A.D., and he also divided them into successive groups.³ There is still much uncertainty on the subject, as I have had occasion to notice of late. To those who are in doubt about it the following brief paper, which is based on a study of the Cairo collection,⁴ may be of some little help. I regret that I do not know much of the material in Europe at first hand.

Graeco-Egyptian mummies are sometimes furnished with painted portraits and sometimes with modelled masks made of various materials, canvas, cartonnage, plaster, and wood. These are the two main kinds of mummy-decoration, though each may be subdivided into various classes. The realistic masks, with some exceptions, are not difficult to date.⁵ Many of them belong to the first century A.D.; they continue to be very common right through the second; some of the best and most naturalistic were made in the first half of the third century; and the custom did not entirely die out till

¹ Ebers, *Hellenistische Porträts aus dem Fayyum*.

² Baedeker's *Egypt*: introductory chapter on Alexandrian art.

³ *Hawara, Biahmu, and Arsinoë*.

⁴ The numbers and plates cited below are those of the catalogue, which will shortly be published.

⁵ For good individual specimens see *Musée*

Égyptien, vol. i. Pl. XXXII.; *Recueil de Travaux*, vol. 17, Pl. III.; *Lady Meux Collection*, Pls. XXVII. and XXVII.A; *Burlington Fine Arts Ech.*, 1895, Pl. XI.; *Annales du Musée Guimet*, xxvi., Pls. XXI.-XXIV.; *Arch. Anz.* 1898, p. 55 ff. (where they are correctly dated). The Graf collection is well known. There is also a fine series in Cairo.

long afterwards.⁶ It has sometimes been thought that the masks in question precede the panel portraits as a class.⁷ The opposite view has also been put forward, that is to say, that the masks are later than the portraits.⁸ I may as well say in advance that neither of these two theories is tenable. It is quite certain that the two series, masks and panels, are to a large extent contemporary. In some places the one sort of decoration was fashionable, in other places the other. The panel portraits are particularly common in the Fayum, though they are also found elsewhere. Most of the masks on the other hand come from the cemeteries farther south.⁹ Several sites have yielded both masks and portraits, *e.g.* Antinoopolis. The two types flourished in different centres, but not necessarily at different periods.

The external evidence for determining the dates of the portraits is scanty. They have not been found in any cemetery which is purely Ptolemaic. Those from Antinoopolis are presumably not earlier than Hadrian, as it was he who founded the Greek settlement there. At Hibeh Messrs. Grenfell and Hunt found a papyrus of the reign of Trajan and the mummy of a woman with panel portrait in two contiguous graves.¹⁰ An inscription of the time of Marcus Aurelius is said to have come from the same find as two Hawara portraits which are now in Cairo.¹¹ The tombstone of Aline in Berlin dates her death to the year 10 (of some Emperor's reign¹² without doubt). The mummy-tickets, some of which come from the same cemeteries as the portraits, belong for the most part to the second and third centuries, though they also reach back to the first.¹³ It is only very rarely, however, that the tickets and the paintings have been found together,¹⁴ and we have no right to assume that the range of the one series is coincident with that of the other.¹⁵ The inscriptions which one finds on the mummies themselves, with the characteristic ΕΥΨΥΧΙ, point decidedly to the Roman period.¹⁶ Certain portraits in the Louvre used to be identified with members of the family of Pollius Soter, who was archon at Thebes in the time of

⁶ For an example of the latest style see *Annales du Musée Guimet*, vol. xxx. 3, p. 152. An interesting detail may be pointed out on these late heads. The shading on the cheeks and chin is rendered by large discs of a darker red than the rest of the face—exactly the same method as was used by the ancient Egyptian artists in the tomb of the wife of Ramses II.

⁷ *Recueil de Travaux*, vol. 17, p. 111 (Bis-sing).

⁸ Budge, *Lady Meux Collection*, p. 355; *Guide to 1st and 2nd Eg. Rooms*, p. 79.

⁹ In *Aegyptiaca*, p. 104, C. Schmidt says that all the plaster masks come from Tunah, but in reality Tunah is only one of the various sites where they have been found.

¹⁰ *Eg. Expl. Fund Report*, 1902 3, p. 2.

¹¹ *Guide to Cairo Museum*, 1903, pp. 347-348. The inscription was seen by M. Gréban but was not acquired by the Museum. On

p. 195 of the same *Guide* it is said by mistake that some of the painted portraits were found at Dimch with an inscription of the reign of Claudius: what was really found with it was a group of portrait-statuettes (*Guide*, p. 252).

¹² As is acknowledged by Ebers, p. 10.

¹³ It is sometimes said that none is known to be earlier than the 2nd century (*Zeitschrift für Aeg. Sprache*, xxxii. p. 36). But Bouriant mentions one from Sohag dated to the 1st year of Vespasian (*Recueil*, 1889, p. 143).

¹⁴ At Akhmin C. Schmidt found a grave containing both tickets and portraits, the latter of inferior style, *Zeitschrift*, xxxiv. pp. 80-81. See also *Arch. Anz.*, 1889, p. 2.

¹⁵ I do not mean that as a matter of fact they are not for the most part contemporary.

¹⁶ Εὐψύχει is the ordinary word of farewell on the funeral inscriptions of Roman Egypt, though the older χαίρει is also found.

Hadrian, but Wileken has rightly cast doubt on the identification.¹⁷ On the whole, however, the external evidence shows that at least some of the portraits date from the second century A.D., and this has been generally admitted even by those who claim that the best of them are Ptolemaic.

Mr. Petrie's account of the portraits is the one which is best worth examining for our present purpose. The date which he proposes for the beginning of the series is 130 A.D. It is got at in this way. The first group of mummies at Hawara in which Greek influence preponderates consists of those with gilded bust-pieces made of stuccoed canvas and cartonnage. They may be divided into two classes,—(1) those in which the front of the head is rendered naturalistically while the bust is decorated with the conventional Egyptian subjects; (2) those which have the bust modelled in the Greek style and the arms represented.¹⁸ The first type is assumed to be earlier than the second, which shows an advance in realism and which is mainly used for women. Now one of the earlier class bears the name ΤΙΤΟΣ ΦΛΑΥΓΙΟΣ ΔΗΜΗΤΡΙΟΣ (Titus Flavius Demetrius) which according to Petrie proves that he was born later than the accession of Vespasian. He therefore assigns the armless busts to about 50–120 A.D. and the busts with arms to 100–130 A.D., admitting that there may be some overlapping between the two groups as most specimens of the second type belong to women. After a few experiments these later busts are succeeded by the painted portraits, examples of both being found in the same tomb. Thus the beginning of the portraits may be placed at about 130 A.D., and they may be regarded as signs of a revival of Hellenistic art caused by the visit of Hadrian.¹⁹

This classification is neat and definite, but I do not think it is correct. One of the gilded busts in Cairo, belonging to a woman called Sambathion,²⁰ has the hair dressed in a peculiar fashion which is characteristic of the Claudian age and of it only.²¹ The other busts with arms have so many points in common with this one that they cannot be separated by any long interval, nor is there any reason for thinking that the mask of Sambathion is the earliest of the series. Mr. Petrie's date, 110–130 A.D., is far too late. As for Titus Flavius Demetrius, he was in all probability a Greek who had acquired the citizenship under Vespasian, and he may have died quite early in the Flavian age. It is a reasonable inference too (*v. supra*) that the armless type of bust was used much longer for men than for women. Looking at the plaster busts from other sites one finds the men represented with conventional wig-ends hanging over their shoulders

¹⁷ *Arch. Anz.* i. p. 6.

¹⁸ Examples of both types reproduced in *Hawara*, Pl. IX.

¹⁹ This idea is repeated by Milne, *Hist. of Eg.* p. 56, and C. Schmidt, *Aegyptiaca*, p. 105. See also *Archaeologia* liv. p. 363.

²⁰ Found by H. Brugsch in 1892. A lead seal

from the same mummy is published in Milne, *Grk. Inscr.* p. 132, No. 33017.

²¹ Waved to each side with a bunch of curls above each temple and a fringe of tiny round ringlets round the forehead. See Bernoulli's remarks on this point, *Röm. Iconographie*, vol. ii. 2, p. 180.

to at least the middle of the second century A.D., while the women's hair and drapery are modelled realistically. A comparison of these plaster portraits from Middle Egypt, of which there is now such a fine series, strongly confirms the conclusion that the gilded Hawara busts belong to the first century.²² Thus, if we accept Petrie's view that the paintings succeed the busts (at Hawara) in a chronological sequence, it follows that many of the former may or rather must be much earlier than the time of Hadrian. And from the fact that specimens of both have in more than one case been found in the same grave,²³ it appears very probable that the two series overlapped to some extent.

It is clear then that the panel portraits were in common use in the second century, but the view that the series does not begin till the reign of Hadrian does not rest on sound evidence. For further information we must turn to the paintings themselves. It was argued long ago that the portraits of bearded men could not be earlier than Hadrian as it was not until his time that beards came into fashion.²⁴ I think that this view contains a kernel of truth, though the argument is sometimes stated too unreservedly. It is not true that from the time of Alexander to that of Hadrian the Greeks in Egypt never wore beards.²⁵ On Ptolemaic tombstones the men are often bearded. One or two portrait statues which are generally thought to be much earlier than Hadrian have short beards,²⁶ and on a few of the first century masks a slight growth of hair is indicated on the face.²⁷ But there are many of the male heads about which there can be no question. They not only are bearded, but they have the curly luxuriant hair which is so distinctly characteristic of the Antonine period:²⁸ it is impossible to suppose them to be earlier. In contrast with these we find a group of men's heads with clean-shaven faces and rather short smooth hair like Roman portraits before the time of Hadrian.²⁹ Some may of course have been painted in his reign, but on the whole (as we have given up the theory that the series begins about 130 A.D.) we may call these the pre-Hadrianic class: I shall not attempt here to distinguish between them. Some of the curly-headed group may be as late as the reign of Septimius Severus. One in particular (Pl. XIII. 2), which has the hair above the forehead divided into three conspicuous locks just like the Imperial portraits, is certainly to be assigned to this period.³⁰ There are

²² I have not seen a sufficient number of them to venture an opinion as to how long a period they cover.

²³ Ebers, p. 9; Petrie, *Hawara*, p. 17.

²⁴ Heydemann, *Sitzungsbericht der Kgl. Sächs. Ges. der Wissensch.* 1888, p. 308. I do not know this article except at second hand, from the references to it in other writers.

²⁵ Cf. Schreiber, *Bildnis Alexanders*, p. 137. For the Ptolemaic tombstones see *Ath. Mitt.* xxvi. p. 280 ff.

²⁶ *E.g. Recueil*, vol. 18, p. 140 (Bissing). See also the Ptolemaic anthropoid coffin in *Fayum Towns*, Pl. XI. (b), 19.

²⁷ *Hawara*, p. 16; also on the Middle Egypt masks, *e.g.* Cairo, No. 33162, Pl. XXIII.: in some such cases, however, what is represented is probably the stubbly chin of a man who did not shave every day.

²⁸ Cairo, No. 33252, Pl. XL. is an excellent example. The same type occurs on Antonine grave-reliefs, *v.* Milne, *Grk. Inscr.* Pl. VIII. No. 9250. It is different from the affectedly disordered hair on certain Hellenistic coin-portraits.

²⁹ *E.g. Hawara*, Pl. X. 10; Cairo, No. 33255, Pl. XLI. (= No. 1 on Pl. XIII.).

³⁰ Cairo, No. 33261, Pl. XLII.

some other male heads which are later still. One or two I think may be dated to the age of Caracalla, while on others we find the close-cropped hair and beard which is a characteristic trait of the succeeding period. A certain example in Cairo, No. 33250, might almost pass for a portrait of Severus Alexander. Evidently then the practice of decorating mummies with portraits painted on wood lasted till well on in the third century.

Something more definite about the earlier part of the series may be learned from the details of the women's portraits. Ebers asks how it is, if the male heads reflect the current Imperial fashion, that the female heads are not similarly influenced. The question is intended as an argument against the view that the portraits of bearded men are later than Trajan, but the assumption which it contains is not well grounded. In many cases the women's portraits follow the same fashions as the Roman court. The tendency is very strikingly exemplified by the modelled masks: here we have a complete series from about the middle of the first century to the beginning of the third. But there are also good instances among the paintings. In particular there is a group of portraits characterized by a thick arch of small curls over the forehead, while the back hair is coiled up behind, usually rather high up, and transfixed by a large pin.³¹ It is exactly the arrangement which one finds on Roman portraits of the Flavian age: *cf.* for instance Bernoulli, *Röm. Icon.* vol. ii, 2, Pls. XIII. ff. and Münzt., ii, 13. There is no other period to which this group of paintings can be assigned. The same peculiar coiffure is likewise found on several of the plaster masks together with other indications of a comparatively early date.³² These portraits then take us back to the last quarter of the first century. Nor, I think, are they the earliest group of all. There are a few others which have the hair dressed in the Claudian fashion: that is to say, it is parted in the middle, waved to each side and more or less curly round the forehead. Pl. XIII. 4 (=Cairo No. 33265) is an example of this type. The Roman fashions of the second century are also represented among the painted portraits. For instance the high elaborate coiffure of Cairo No. 33222 shows that it was painted in the period of Trajan or Hadrian,³³ while Graf No. 15 is distinctly of the later half of the same century and is to be compared with the portraits of Lucilla and Crispina. There are several other styles of hair-dressing on the painted heads for which one can find more or less close parallels among Roman portraits of the first and second centuries, but the above examples are sufficient for our present purpose.

Another thing which is of some use for determining the age of the portraits is the women's jewellery. Mr. Petrie has used this criterion. He notes in particular that the three main types of earrings which one finds on

³¹ *E.g.* Graf No. 8; *Hawara*, Pl. X. No. 12; Cairo 33223 and 33237 (=Pl. XIII. 3). Ebers (p. 64) compares the coiffures on certain old Egyptian and Cypriote heads, but neglects the Roman analogy which is much

more obvious and striking.

³² *E.g.* Cairo No. 33181, Pl. XXV. I have seen others in the dealers' shops.

³³ *Guide* 1903, p. 356. There are several parallels among the plaster masks.

the portraits are (1) the ball-earring Fig. 1, *a, b*, (2) the hoop-earring Fig. 1, *c*, (3) the bar-earring Fig. 1, *d-f*. He assumes these types to be roughly consecutive, assigning (1) to the first half of the second century, (2) to the second half, and (3) to the first half of the third. Thus the fine portrait, Pl. XIII. 3, which we have seen good reason for placing in the Flavian period, would according to this classification belong to the latest group. But Mr. Petrie's division is far too precise. Now that we have so many well-dated masks it is easier to follow the history of the jewellery. Judging then from the masks alone we find that the ball-earring was a common type in the first century but becomes much less popular in the second. The hoop-earrings were also very fashionable during at least a great part of the first century and continue to be quite common till past the middle of the second. The third type is so much rarer than the other two on the masks which I have seen that I do not venture to draw any definite conclusion about the range of its popularity. But the fact that earrings of this form have been found at Pompeii³⁴ shows that it also was known in the first

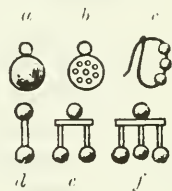


FIG. 1.—FORMS OF EARRING.

century A.D. It is only natural then that it should appear on several of the portraits which we assigned to the Flavian age. All three types in fact are much earlier than Petrie supposes and they do not follow each other with mechanical regularity. Nevertheless as a secondary means of dating and classifying the portraits the jewellery is of great value if used with caution³⁵; and there is now plenty of material for comparative study,—earrings, necklaces, bracelets, and diadems.

The conclusion to which the foregoing arguments lead is that the portraits range from the Claudian age to the second quarter of the third century. There may be some specimens both earlier and later than those which I have discussed above, though I doubt if the series will be found to extend beyond these limits. It is noteworthy that the modelled masks of predominantly Greek style occupy much the same period.³⁶ In the case of the

³⁴ See Monaco, *Museo Nazionale*, Pl. CXI. Schreiber, *Alex. Toreutik*, p. 305. The general type, a cross-bar with three pendants, is of course quite early.

³⁵ An article by Folnesies on this subject, which I have not had an opportunity of reading, is mentioned by Wickhoff, *Roman Art*, p. 160.

Folnesies, as I learn from this reference, has shown that the gold ornaments of the women belong to the age of Septimius Severus. I presume he does not mean all of them.

³⁶ I do not refer to figures like *Zeitschrift für Aeg. Sprache*, vol. 41, p. 10, Fig. 8, nor do I include the late Deir el-Bahari type.

masks there was a gradual change from the Egyptian to the Greek style, and even in the second century many of the faces bear signs of their Egyptian descent. The later ones are more free and naturalistic than the earlier groups.³⁷ But the paintings from the first show an entire freedom from Egyptian influence, even when the rest of the figure is covered with the usual mythological scenes. The masks in fact derive from Egyptian, the panels from Greek art. Not long after the naturalistic style had been adopted in the modelling of the busts, the idea arose, probably in the Fayum, of introducing a painted portrait in place of the mask. Some of the early portraits, perhaps the earliest of all, were on cloth,³⁸ and sometimes too the rest of the figure was painted on the outer wrapping of the mummy.³⁹ This particular style of decoration survived into Byzantine times.⁴⁰ But the panel portraits soon came into regular use, to the exclusion in some places of all other forms of mummy-decoration. While the early masks are tentative essays in an alien art, the style of the paintings from the very beginning is free and finished and entirely Greek. These rapidly painted panels, no doubt for the most part mere commissions from the undertaker,⁴¹ are products of a highly developed art, put to an incongruous use. We may be sure that the style of which they furnish so many fine examples was no sudden innovation in Egypt. Wickhoff, indeed, who dates them to the age of Septimius Severus and argues that the whole group falls within one short period, claims them as illustrations of the reflex action of Roman art on the Greek East.⁴² But the series can be traced back to a time when this so-called Roman art was only coming into existence in Rome itself. It is not in Rome but in Hellenized Egypt that the origin of the style is to be looked for. Ebers was essentially right in calling the portraits Hellenistic.

Ebers, however, did not mean merely that they were to be classed as Hellenistic from the aesthetic point of view. He held that the series actually began in the second century B.C., that the best of them were painted in the Ptolemaic period, and though he admits that some belong to the second century after Christ, he speaks of these as inferior works. But the reasons which he gives for his opinion are singularly feeble. He says in general terms that the style is too good and too realistic to be Roman,—which is merely prejudice. Wickhoff on the other hand, though mistaken about their date, compares

³⁷ Similarly some of the most Greek in style of the grave-reliefs from the Delta cemeteries belong to the latter half of the second century: the order of development is not described correctly in my catalogue of the Cairo sculpture, p. xiv.

³⁸ *Hawara*, p. 17; Cairo Nos. 33214, 33268; Berlin catalogue, p. 351.

³⁹ Even when the head is painted on an inserted panel, e.g. Cairo No. 33217.

⁴⁰ E.g. Cairo No. 33282, Pl. XLVIII. For other examples from various periods see Hilton

Price Catalogue, No. 49, *Annales du Mus. Guimet* xxx. 2, Pl. I.

⁴¹ An interesting panel found by Grenfell and Hunt in the Fayum has memoranda on the back concerning the features of the person to be portrayed (somewhere in the Cairo Museum; *Journal d'entrée*, No. 34253). In many cases the paintings are no doubt far from being faithful likenesses, though they do not degenerate into conventional types as the masks tend to do.

⁴² *Roman Art*, p. 160.

them very happily with Roman portraits of the first century A.D. In the next place it is proved by ancient records, as Ebers says, that the Greeks in Egypt had adopted the custom of mummifying their dead by the second century B.C. But that by itself is no clue to the age of the portraits. All the evidence goes to show that Greek mummies were at first decorated entirely in the Egyptian manner.⁴³ For instance there is nothing Greek about the mummy of Theodorion in Cairo except the name and the inscription on the coffin.⁴⁴ Again, there are among the portraits certain heads with what is apparently a hanging tuft of hair on the right side. This has been identified, perhaps rightly, with the Egyptian side-lock. There would be nothing remarkable about it if the persons represented were children. But Ebers claims that one or two of them are grown-up men,⁴⁵ and the only adults who wear the side-lock on Egyptian monuments are the princes of the royal family. So he elaborates a theory that these portraits may represent young men of good family who either were sons of the king's *συγγενείς* or had been pages at the Alexandrian court, *βασιλῆιοι παῖδες*, and who may therefore have been permitted to wear the side-lock to a comparatively advanced age. This is offered as a serious argument that the portraits are Ptolemaic! Lastly, Ebers points to certain portraits of young men wearing mantles of hyacinth-coloured purple and jewelled bands which are supposed to be sword-belts and which in three cases out of four are hung over the right shoulder.⁴⁶ He argues that these paintings must be Ptolemaic, for in Roman times nobody except the Emperor was allowed to wear purple of this particular shade and the Roman custom, unlike the Greek, was to wear the sword-belt over the left shoulder. The latter statement is an error. On Roman monuments one often sees the belt fastened over the right shoulder and sometimes over the left.⁴⁷ There was certainly no fixed custom throughout the Empire. As regards the other point, the women's dresses on the panel portraits are usually of purple, varying from lilac to dark violet, and in some cases the men wear a purple cloak.⁴⁸ If anyone will take the trouble to pick out the portraits (and also the plaster busts)⁴⁹ on which the drapery is of the dark hyacinthine shade, he will not discover a single one with any distinctively Ptolemaic trait, but he will find several which it is

⁴³ For information about Ptolemaic cemeteries in the Fayum see especially Grenfell, Hunt, Hogarth, *Fayum Towns*, and *B.C.H.* xxv. p. 380 ff.

⁴⁴ *Guide* 1903, p. 364.

⁴⁵ Graf, Nos. 7 and 60. The latter he says represents a man at least 20 years old. But there is a portrait in Cairo of exactly the same type on a well-preserved mummy, the length of which, including the wrappings, is little more than 1 metre (No. 33227, Pl. XXXV)! No. 7 too is clearly not an adult. All the heads that I know of with this bunch at the side are simply portraits of children. In one

case a girl wears it on the left side (Cairo, No. 33216).

⁴⁶ Nos. 4, 5, 6, 22. No. 5 wears the belt over the left shoulder: see also *Burlington Fine Arts Exhibition* 1895, Pl. 9.

⁴⁷ See for instance the article *ballens* in Daremberg and Saglio.

⁴⁸ Purple drapery is much rarer on the plaster busts. Probably it was a convention among the painters, like the grey background. The differences in the depth of the purple are largely the effect of different light and shade.

⁴⁹ *E.g.* Cairo No. 33155.

impossible to attribute to any period except the first and second centuries A.D.⁵⁰ That being so, it is needless to inquire further whether this really was the Imperial purple and what exactly was the scope of the law. Perhaps the other archaeologists who share the opinion of Ebers rely on some better arguments which have not come to my knowledge, but at present the question seems to me to stand thus. The external evidence, though not so conclusive as one would like, gives no support to the theory that the best portraits are Ptolemaic, but is altogether against it. Again, the internal details of the portraits themselves, while they contain nothing that is distinctively Ptolemaic, prove that a large part of the series (including much of the best work) is certainly of the Roman age. And if we look closely into those specimens which in themselves seem to bear no decisive indication of date, we find so many points of connexion with the undoubtedly Roman ones, they fall so naturally into place among the others, that we are forced to pronounce the whole series to be Roman.

C. C. EDGAR.

Cairo.

⁵⁰ This is true even of the four portraits selected by Ebers. No. 6 for instance is clearly an Antonine work.

THE APOXYOMENOS OF LYSIPPUS.

IN the *Hellenic Journal* for 1903, while publishing some heads of Apollo, I took occasion to express my doubts as to the expediency of hereafter taking the Apoxyomenos as the norm of the works of Lysippus. These views, however, were not expressed in any detail, and occurring at the end of a paper devoted to other matters, have not attracted much attention from archaeologists. The subject is of great importance, since if my contention be justified, much of the history of Greek sculpture in the fourth century will have to be reconsidered. Being still convinced of the justice of the view which I took two years ago, I feel bound to bring it forward in more detail and with a fuller statement of reasons.

Our knowledge of many of the sculptors of the fourth century, Praxiteles, Scopas, Bryaxis, Timotheus, and others, has been enormously enlarged during the last thirty years through our discovery of works proved by documentary evidence to have been either actually executed by them, or at least made under their direction. But in the case of Lysippus no such discovery was made until the very important identification of the Agias at Delphi as a copy of a statue by this master.

Hitherto we had been content to take the Apoxyomenos as the best indication of Lysippic style; and apparently few archaeologists realized how slender was the evidence on which its assignment to Lysippus was based. That assignment took place many years ago, when archaeological method was lax; and it has not been subjected to sufficiently searching criticism. The only documentary evidence for it is to be found in the words of Pliny. Pliny mentions that one of the best known statues of Lysippus was an athlete scraping himself with a strigil, *destringens se*. And he tells us how Lysippus introduced into sculpture a new canon of proportions, *capita minora faciendo quam antiqui, corpora graciliora siccioraque, per quae proceritas signorum major videretur*. The first of these statements does not greatly help us, as the motive of the strigil is rather common in Greek sculpture. It is the second statement which has impressed archaeologists. And certainly, anyone comparing the Apoxyomenos with the athletes of Polycleitus will see that in it the head is smaller, the body slighter and more sinewy, the apparent height greater. But these features, though especially belonging to Lysippus and his school, do not appertain to them exclusively. For example, the fighting warriors of the Mausoleum frieze possess these characteristics in as

marked a degree as the Apoxyomenos. And no one attributes the Mausoleum frieze to Lysippus. It would seem then desirable not to treat the attribution of the Apoxyomenos to Lysippus as a settled question, but to consider it afresh, and in a broader light. So Dr. Klein¹ writes, 'a more thorough-going treatment of Lysippus in a monograph may greatly advantage us; and the time for it seems to have now arrived.'

1.—*The Agias and the Apoxyomenos.*

The opportunity for reconsideration is offered us by the discovery at Delphi of the group dedicated by Daochos, one figure of which is now known to be a copy of a bronze statue by Lysippus representing Agias or Hagias, a noted athlete of the fifth century, and so a more or less ideal athletic type of that master. It is quite certain that it will be necessary in future to take the Agias, and probably other statues of the group, into account in speaking of the work of Lysippus. And here we come to a difficulty. For until M. Homolle and his colleagues have fully published and commented upon the whole series of these statues we cannot treat of them in detail. We can but break ground for discussion.²

I must, however, say a few words as to the claim of the Agias to be thoroughly Lysippic. I need not repeat the inscriptional evidence which shews that it is probably a contemporary version in marble of a bronze set up in Thessaly.³ That this replica was made by the master himself is most unlikely; he was pre-eminently a worker in bronze, not in marble. But there would be little point in setting up at Delphi a duplicate of the Thessalian group, unless it were a close imitation of it; and at all events it is a work of the time and the school of Lysippus. It has claims to represent his style, which, if not conclusive, are far more weighty than those belonging to any other extant figure.

M. Homolle sums up the case for regarding the statue at Delphi as a replica of the bronze of Pharsalus as follows,⁴ 'Le fait (the omission of proper support to the marble figure) marque avec quel respect du modèle la copie avait dû être faite, et qu'on avait cherché à en faire une reproduction fidèle, à en garder l'aspect, le rythme, et le style, au prix même de difficultés, voire d'une imprudence technique. Il prouve que la copie mérite notre confiance, qu'elle a une valeur documentaire, qu'elle peut, dans la mesure où cela est possible, tenir lieu de l'original.' This statement is, perhaps, a little too positive; but yet we are obliged to attribute high documentary value to the Agias statue.

Casts of the Agias and of the Apoxyomenos have stood side by side in the Ashmolean gallery of casts for years. I have frequently studied

¹ *Geschichte der griech. Kunst*, ii. 273.

² There is a preliminary discussion of the group in the *B.C.H.* vol. 23, with Plates. The Agias is repeated in this *Journal*, 23, 129. The

forms Agias and Hagias seem equally correct.

³ See *B.C.H.* 23, p. 422: Preuner, *Ein delphisches Weihgeschenk*, 1900.

⁴ *l.c.* p. 444.

them, alone and in company with pupils and colleagues. And I have reached the decided opinion that if the Agias is at all trustworthy as a copy of a Lysippic bronze, then the Apoxyomenos cannot, as it stands, be Lysippic. When placed side by side, the two figures not only differ in work and in style, but they differ so markedly that they must belong to different authors and to different periods.⁵ This view, however, is one to which archaeologists at present are not inclined, and I must set it forth with proper grounds and reasons.

There was one event in the history of Greek sculpture which overshadows in importance all others. This event is the application to sculpture of the results of anatomical study. Prof. Lange has some excellent observations on this subject.⁶ Before the Hellenistic age, the Greeks 'knew the naked body, as one knows one's native tongue. But no one had a clear conception of the causes of what took place; men knew not what it was that took place beneath the skin, and produced the undulations of surface. Modern science will not by any means allow that such an empirical knowledge of surface deserves the name of science. But what in the view of science is a low degree of development, must from the artistic point of view be regarded as not merely adequate, but in fact as far better and more successful than knowledge technically scientific.' Lange proceeds to point out that it was first at the Museum of Alexandria, about B.C. 300, that human anatomy was seriously studied by such masters as Herophilus and Erasistratus. It was said in later times of Herophilus that he dissected 600 corpses. A historian of anatomy writes 'The special branch of anatomy which at this period was founded, and advanced with rapid steps, was myology (study of muscle), which had hitherto been unknown: it was now cultivated to such a degree that most of the muscles were known to the physicians of the school of Alexandria.'⁷

This growing knowledge of anatomy soon reacted on the art of sculpture, with the final results which are obvious to us in such works as the Fighter of Agasias in the Louvre, or the Laocoon. These works are far indeed from the simplicity of the early Greek sculptor, who was content to see what offered itself to the eye. They are learned works, of great technical perfection, which have almost the appearance of anatomical models. The elastic skin no longer hides the working of the muscles beneath, but they are exhibited in all their connexions and ramifications in a state of tension.

The introduction of the study of anatomy, then, is the great dividing event in the history of ancient sculpture. Of course many works made after B.C. 300 are not especially anatomical, proceeding on earlier lines. But it

⁵ Dr. Amelung in his *Catalogue of the Vatican Sculpture* (p. 87), says that the Agias figure 'offers the closest analogies in style to the Apoxyomenos.' I cannot think that so good a judge would have made so extraordinary a statement if he had seen casts of the two

statues side by side.

⁶ *Die menschliche Gestalt in der Geschichte der Kunst*, ii. Theil, p. 39.

⁷ Lauth, *Histoire de l'Anatomie*, 1815, p. 118.

may fairly be said to be impossible that a work of the period before 300 should shew clear traces of anatomical study. If so, no statue of this tendency can be a faithful copy of a work of Lysippus.

If, then, we consider the two statues which have most direct claim to be Lysippic, the Agias and the Apoxyomenos, we shall at once see that the



FIG. 1.—FOOT OF APOXYOMENOS.

Agias is on the earlier side of this great dividing line, and the Apoxyomenos on the later side. The conclusion seems to me obvious and inevitable, that the Agias and not the Apoxyomenos is a trustworthy guide to Lysippic style.



FIG. 2.—FOOT OF AGIAS.

Ex pede Herculem. Let anyone carefully compare the foot of the Apoxyomenos (Fig. 1)⁸ with the feet of statues belonging in origin to the fourth century, the Hermes of Praxiteles or other Praxitelean statues, the Meleager of the Vatican, the Agias (Fig. 2).⁸ He will find it to be quite of

⁸ From a cast.

another type, long, lean, sinewy, all skin and bone and tendon, without flesh to soften the transition. Then let the same foot be compared with that of the Fighter of Agasias: the two will be found to belong to the same class, though the Agasias statue is somewhat more extreme. And what is true of the foot is true of all parts of the body. Sir Charles Newton, who was in the habit of examining Greek statues with some of the best judges, besides being a skilled judge himself, used to say of the Apoxyomenos that it was a man skinned; and that is certainly the impression which its learned and elaborate technique leaves on the student.

I must not, however, be supposed to say that the Apoxyomenos is a purely naturalistic work. On the contrary it contains two elements not easy to reconcile, a striving to embody academic rule or tradition and an attempt at anatomic correctness. To the first of these elements archaeologists have done justice: it has been recognized that the statue represents a distinctive

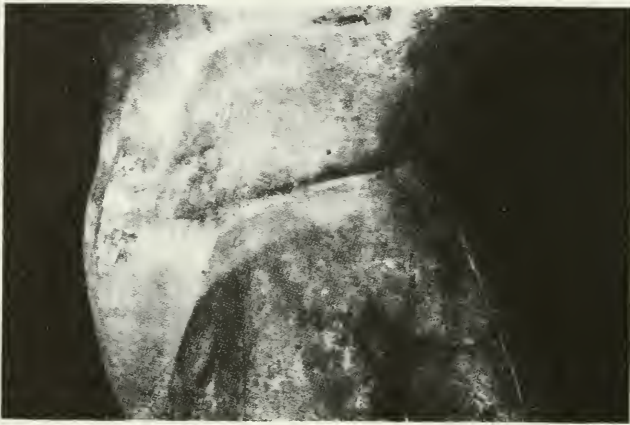


FIG. 3.—WAIST OF APOXYOMENOS.

school, and is intended to embody a canon of proportions. And archaeologists have been quite right in identifying its school as that of Argos and Sicyon. Among other details the remarkable emphasis laid on the muscle just above the knee, which Michaelis has pointed out as a mark of the school of Polycleitus, confirms this view. But the second element is not less prominent. I would cite the treatment of two parts of the body in particular, as examples.

On the front of the left thigh of the Apoxyomenos there is a triangular depression between the muscles called tensor fasciae and sartorius (Fig. 3).⁹ There is also a marked division between the gemelli muscles in the calf of the right leg at bottom. I have not found these points, which are anatomically correct, thus noticed in works of the fifth or fourth centuries. Both are

⁹ From a cast.

notable in the Agasias figure. No doubt a minute observation of a model with highly developed muscles and no fat might enable any sculptor to observe these points: I have seen photographs from the living body in which both are clear. But Greek sculptors, even in the fourth century, preferred to cover the working of the muscles with a layer of flesh. In such emphasis on exact points of muscular structure as we find in the Apoxyomenos, we may notice a different spirit, and the influence of anatomic study, of myology. Again, in the side above the hip we may notice a treatment of the obliquus externus muscle quite different from that of the Agias (Fig. 4).¹⁰ Indeed we may say that the way in which the upper part of the body is joined to the hips is quite different from anything to which we are accustomed in fourth century statues: the result being to give the body a swing and a motion which are very notable.



FIG. 4.—WAIST OF AGIAS.

Of the influence of an anatomical school, as well as of the swing and motion in the Apoxyomenos, the Agias shews no trace.

While the general proportions of the two figures as regards length of lines are not dissimilar, the Apoxyomenos being the slighter of the two, in the treatment of surface and of muscle the two statues differ fundamentally. We find in fact between the Agias and the Apoxyomenos exactly the development of which Lange, in the passage already cited, has written. The man who made the Agias, like Praxiteles and other fourth century sculptors, copied what was visible on the surface of male bodies not exceptionally trained, but exceptionally beautiful. The man who made the Apoxyomenos, though he was academic in style, yet knew what lies beneath the surface of the body; and this knowledge in some cases, though not in all, guided his hand, perhaps without his recognizing the fact.

¹⁰ From a cast.

I am aware that this is dangerous ground whereon to dogmatize. In Greek sculpture, in spite of its general regularity, there are abnormal phenomena here and there. Occasionally, at all periods, we may find striking bits of naturalism scarcely consistent with their surroundings. For example, in the National Museum at Athens, there is an archaic male figure,¹¹ the work of the knees and shins of which is wonderfully detailed. In the middle of the fourth century it is possible to find figures which have a certain anatomical appearance. The most remarkable instances known to me are some of the men and some of the horses in the Amazon frieze of the Mausoleum.¹² But these figures, though the muscles and veins are very prominent, do not seem to me to be so correct in detail as to indicate any anatomical study: the opposite is rather true of them.

We must, however, see whether there is any extant evidence to be gained from statues, as to the treatment of limb and muscle by Lysippus. It has been not uncommon to find such evidence in a statue of the resting Herakles in the Pitti Gallery at Florence,¹³ on the basis of which is the inscription *Λυσίππου ἔργον*. It has sometimes been assumed that the inscription guarantees this work as an exact copy of a Herakles of Lysippus. This, however, would certainly not be a legitimate assumption, were the antiquity of the inscription beyond dispute, which it is not. And as the head upon the statue is a portrait of Commodus,¹⁴ the notion that we have an exact copy is evidently fanciful. The statue belongs to a large class, of which the best known example is the Herakles Farnese at Naples, made by the sculptor Glycon. These figures differ among themselves in a marked degree in work and style, and there is none but internal evidence as to which is nearest to Lysippus. I should grant as a probability, though not as a certainty, that Lysippus made a Herakles in this attitude; but in fact, as has been more than once pointed out, the attitude goes back beyond Lysippus to the fifth century.¹⁵ None of the copies throws any light on the detailed treatment of surface by Lysippus. The Herakles who has strongest claim to a Lysippic character is the young Herakles in the Lansdowne Gallery, the close likeness of which both in pose and detail to the Agias has already been pointed out in this journal,¹⁶ and is obvious to everyone who compares casts or good photographs of the two. Yet of course Lysippus did not confine himself to one type of Herakles; and he probably represented the hero, as he did Alexander, at various periods of

¹¹ 'Εφ. 'Αρχ. 1902, Pl. III. The photograph is not so taken as to bring out the points above mentioned.

¹² See especially Brunn, *Denkmäler*, Pl. XCVIII, 100.

¹³ Amelung, *Führer durch die Antiken in Florenz*; Brunn, *Denkmäler*, Pl. CCLXXXIV.

¹⁴ This fact, strangely enough, is not noted by Amelung.

¹⁵ Mahler, *Polyklet und seine Schule*, p. 146;

Furtwängler in Roscher's *Lexikon*, i. p. 2173; *Jahrbuch des Inst.*, Anzeiger 1894, p. 25. Next to the inscription cited above, the best evidence for a Lysippic statue of this type is found in a small copy of it on a coin of Alexander the Great, probably struck at Sicyon: *Num. Chr.* 1883, Pl. I. 5.

¹⁶ Vol. 23, p. 129. So M. Homolle in *B.C.H.* 23, 456.



1



2



3



4

life. Of the bearded heads of Herakles, the finest is that in the British Museum,¹⁷ and it may in essentials go back to a Lysippic original. The bearded statues of the standing Herakles, figured by Mahler in the work already cited (pages 145 and 147), are probably nearer to the style of Lysippus than is the statue of Glycon.

We possess, in the reliefs which adorned the basis of the statue of Pulydamas at Olympia by Lysippus,¹⁸ what ought to be very valuable



FIG. 5.—HEAD OF AGIAS.

material for determining his style. These reliefs, though not of course by the Master himself, belong to his school. The reliefs from Mantinea, which in a similar way represent the school of Praxiteles, no doubt are of great value in the consideration of the work of Praxiteles. But unfortunately the

¹⁷ *Ancient Marbles*, i. 11, cf. the Steinhauser head, *Mon. d. I.* viii. 54.

¹⁸ *Olympia*, iii. Pl. LV. 1-3, cf. text, p. 209. (Treu).

Pulydamas reliefs are so greatly damaged, that they are almost worthless for any such purpose. Dr. Treu ventures on the observation that the legs of Pulydamas in the central relief, which represents him carrying on his shoulders a vanquished antagonist, are thin and sinewy. The figure of the seated Persian king is majestic and dignified. Further than this we are scarcely able to go.

It would thus seem that the definite evidence for the treatment of the human body by Lysippus, outside the monument of Daochus, is but slight.



FIG. 6.—HEAD OF APOXYOMENOS.

Turning from the body to the head of the Agias and the Apoxyomenos, we reach similar results. The head of the Agias (Fig. 5)¹⁹ is strangely formed, with low forehead and small occiput; but in the treatment of forehead, eye, and mouth, one may trace some resemblance to the Tegean heads, a resemblance which seems to shew, at all events, contemporaneousness. And it is by no means inconsistent with what Plutarch tells us as to the success of Lysippus in representing the manly and leonine air of Alexander. To this subject we must presently return. The hair of the statue does not, it must be confessed, shew much of the distinction and

¹⁹ *Fouilles de Delphes*, Pl. LXIV.

expressiveness which belong to the hair of some Lysippic heads. It is in fact only sketched out. But we must remember two things: first, that a very simple form of hair is appropriate to a panceratiast, and second, that in the copying of bronze in marble scarcely any part of the figure would suffer so much as the hair.

For a more precise and detailed description of this head, the reader must turn to the paper of M. Homolle,²⁰ who, in concluding, speaks of 'les différences profondes qui existent entre la tête d'Agias et celle de l'Apoxyomenos, et qui, au milieu de beaucoup d'autres ressemblances, pourraient faire hésiter sur la commune origine des deux œuvres.' I think that anyone who compares our figures, 5 and 6, will agree with this.

It is a curious proof how the attribution of the Apoxyomenos to Lysippus has blinded the eyes of archaeologists, that the head of that statue (Fig. 6)²¹ has been taken as an index of his representations of the male head. This head is in fact of early Hellenistic type, and its want of expression stands in marked contradiction to what Plutarch tells us about Lysippus. From the testimony of ancient writers we learn that the works of Lysippus were of a stormy, expressive, and idealizing character. But we throw all this testimony aside, because we are determined to judge Lysippus by the Apoxyomenos. It has indeed become quite the custom to speak of Lysippus as in style somewhat superficial and inexpressive. These phrases may apply to the author of the Apoxyomenos. But to apply them to Lysippus is to run counter to the most definite statements of ancient writers.

We owe to the wide knowledge of Professor Furtwängler the observation that the head of the Apoxyomenos is the earliest young head in which the marked furrow in the forehead, usual in works of the fourth century, is replaced by a wrinkle.²² It is true that in the heads of the Olympian pediments and the Parthenon metopes the horizontal wrinkle is quite usual; but this is very different, quite superficial; the wrinkle of the Apoxyomenos strikes one as something new and something decidedly post-Praxitelean.

II.—*The Date of Lysippus.*

Probably some archaeologists may be disposed to allow a considerable difference in date between the Agias and the Apoxyomenos, but may yet hold that both may go back to Lysippus, the one statue representing the work of his youth, the other of his maturity or old age. In order to meet this objection, I must consider what is really the date of Lysippus. Canina saw no great difficulty in attributing the Apoxyomenos even to the time of Polycleitus. But the perception of its true period and character has gradually dawned on archaeologists. And the result has been a curious one: it has been a gradual pushing of Lysippus from his proper place in the

²⁰ *B. C. H.* xxiii. p. 453-6.

²² *Masterpieces*, p. 304.

²¹ From a cast.

history of Greek art. Archaeologists could not separate him from the Apoxyomenos, and so had to bring him down to a later and later period.

Thus there has arisen an increasing tendency to consider Lysippus as a far younger contemporary of Scopas and Praxiteles. Recently it has become not unusual to make his period the latter half of the fourth century; while Scopas and Praxiteles are placed in the middle of that century. When however we try to throw into perspective the evidence on which this view is based, discriminating between what is really trustworthy and what has little value, we shall find that it does not really support the current view.

To begin with *Scopas*. His date can only be fixed by that of the Mausoleum, about B.C. 350, and that of the later temple of Ephesus, during the earlier life-time of Alexander the Great. His work on the temple of Athena at Tegea has usually been placed much earlier than the time of the Mausoleum. The old temple was destroyed about B.C. 394, and it is presumed that it was shortly afterwards rebuilt under the direction of Scopas. But for the time of this rebuilding there is no documentary or inscriptional evidence, and if we go by the evidence of the remains themselves, a later date than B.C. 390 would suggest itself. M. Mendel in the *Bulletin*²³ observes that though the architectural decoration of the temple recalls that of the Erechtheum it is decidedly later, and resembles rather that of the great temples of Asia of the middle of the fourth century, or even of the Sarcophagus of Alexander. In regard to the sculpture also, it is not easy to place it forty years earlier than that of the Mausoleum. It would naturally suggest itself that the new temple at Tegea was built just at the time, about 370-360 B.C., when so much temple building was going on in Peloponnesus, at Messene, Megalopolis, and other places. It would thus seem probable that the sculptural career of Scopas did not begin so early as is usually supposed. To the main argument of the present paper, this is a question of very small importance; but it is worth while in passing to question the view which makes Scopas precede Lysippus by a generation.

The date of Pliny for *Praxiteles*, B.C. 364, is perhaps that of the Aphrodite of Cnidus. Pliny's date for his sons, not a trustworthy date, as their names do not come first in the list, is B.C. 296, the same date as that of the sons of Lysippus. M. S. Reinach gives the Hermes with the child Dionysus to B.C. 363, Prof. Furtwängler to B.C. 343. We have in fact little evidence for the date of Praxiteles beyond the statement of Pliny, and the internal evidence of extant statues. The most recent writer on Praxiteles, M. Perrot, thinks that he was born about B.C. 390.

Lysippus' date in Pliny is simply taken from the *floruit* of Alexander the Great. It is B.C. 328. This may possibly be the date of a noted portrait of Alexander by Lysippus, though as Alexander was then campaigning in Bactria, no portrait of him, in the strict sense of the word, could be made at that time. We are however told that Lysippus made many statues of Alexander from

²³ *E.C.H.* 1901, p. 255.

his boyhood onwards, which will take us back to the middle of the century. The connexion of the name of Lysippus in the well-known story with that of Eupompus the painter seems to take us further back still. Eupompus belongs to the latter part of the fifth and the early part of the fourth century; and if Lysippus even in his youth was contemporary with Eupompus, he cannot have been born much later than B.C. 400. However, of course not much serious weight can be attached to these anecdotes about sculptors.²⁴ More important is the date given us by the Lysippic portrait of Troilus mentioned by Pausanias.²⁵ Pausanias tells us that Troilus while Hellanodikes won two victories, one with grown horses and one with colts, in Ol. 102, B.C. 372; and that Lysippus executed his statue. The lower part of the base of this statue, on which the artist's name probably appeared, has been lost; but the epigram is still extant in which Troilus says that he won with ἵπποι ἀλοφόροι and then ἐφεξῆς with ἵπποι. This has been construed as meaning that Troilus was victorious in B.C. 372 and then again in the next Olympiad, B.C. 368. But Pausanias says distinctly that both victories were won in a year, and ἐφεξῆς seems to me to bear that interpretation, and that interpretation only. It is clear then that the two victories of Troilus were both won in B.C. 372. And the lettering of the epigram furnishes satisfactory proof that the statue was erected at once. Mr. M. N. Tod, whom I have consulted on the epigraphic point, observes that the forms of the letters, taken with the use of O for OY, would seem to give a date somewhere between B.C. 400 and 360. The forms indeed are much like those of the inscription in Loewy, No. 102, in regard to which Loewy remarks, 'Schriftcharakter und Orthographie (O = OY) der ersten Zeit nach Euklid.' Thus there is no reason for rejecting the natural view, that the statue of Troilus was set up soon after B.C. 372.

The contrary has been maintained by high authority; but the reason probably is the difficulty of assigning so early a date to a work of Lysippus, and this reason falls away if we divide the sculptor from the Apoxyomenos. It would seem then that Lysippus was at work quite as early as Praxiteles, and very possibly as early as Scopas. He was strictly their contemporary. On the other hand, he would certainly seem to have outlived them, since he worked for Alexander and his generals, while we do not hear that Scopas and Praxiteles undertook commissions for these. His latest works take us down at all events to B.C. 320. At that time he may well have been about 70; and the lives of Titian and Michael Angelo and Watts prove that a man may do remarkable work at that age.

There is some evidence for work by Lysippus at a later date than B.C. 320. And if he were born, as seems probable, about B.C. 390, he may well have accepted commissions, to be executed mainly by his pupils, for several years after 320. But at the same time we may observe that the proofs that this was the case are of a flimsy character.

²⁴ The story mentioned seems to be vouched for by Duris who is almost a contemporary; it stands therefore on a better basis than most

tales of the kind.

²⁵ vi. 1, 4: cf. Loewy, *Inscr. griech. Bildhauer*, p. 76.

The great bronze group at Delphi by Leochares and Lysippus which represented the lion hunt of Alexander and Craterus has become more of a reality to us since the base of it with the inscription has been discovered at Delphi.²⁶ This inscription states that the work was vowed by Craterus and dedicated by his son. Craterus fell in battle in B.C. 321. The most natural and simple supposition is that the work by Leochares and Lysippus was already begun but not completed when Craterus was slain.

As to the other inscribed base by Lysippus,²⁷ Loewy has shewn so many ambiguities to inhere in its dating, that we need not here discuss it.

Pausanias²⁸ tells us of a certain Cheilon, to whom on account of his gallant death in a battle, a statue was set up at Olympia by the Achaeans. This statue was by Lysippus, and from this fact Pausanias infers that Cheilon must have fallen either at Chacroneia (B.C. 338) or before Lamia (B.C. 322). Pausanias judges justly: these were the two occasions during the lifetime of Lysippus, when the Achaeans took part in an important war. And both of these dates fall within his working-time, as I would fix it.

Mention must however be made of one or two items of evidence which seem to indicate a later date. There is the well-known inscription copied in the Vatican by Pietro Sabino,²⁹ Σέλευκος βασιλεύς, Λύσιππος ἐποίηι, which has been supposed to shew that Lysippus made a portrait of Seleucus after he had taken the kingly title in B.C. 306. But we have only to suppose that the word βασιλεύς was (naturally enough) added by the Roman copyist, to destroy the special bearing of this inscription. That Lysippus should have, either before or after the death of Alexander, made a portrait of his trusted officer Seleucus, as of Craterus and many others, is likely enough. As to the story in Athenaeus which connects the name of Lysippus with the foundation of Cassandreia in B.C. 316, it need not be taken seriously.

There is thus no serious evidence for works of Lysippus of a later date than about B.C. 320. It is convenient in histories of sculpture to place him in a later chapter than Praxiteles and Scopas. But he seems during all the earlier part of his life to have been strictly their contemporary: very probably all were born early in the fourth century, though Scopas might have been born in the fifth. On the other hand it can scarcely be doubted that Lysippus outlived the other two. The number of his works, and his connexion with the generals of Alexander, prove this. Yet this fact is not of great importance in regard to his style. For it is very unusual for a great artist seriously to alter his method of working in his old age. By B.C. 340 or thereabouts he would have fully formed his style; and after that so busily active a man would scarcely change it.

It is the more important to point out the contemporaneity of the three great masters of the fourth century, because it has of late become something of a fashion to insist on the influence of Scopas on Lysippus. Such influence

²⁶ Homolle in *B.C.H.* xxi. p. 598.

²⁸ vi. 4, 6.

²⁷ Loewy, *Inscr. griech. Bildhauer*, No. 93.

²⁹ Loewy, No. 487.

Plutarch, *Alex.* 40.

there would naturally be: great contemporary artists usually exercise some influence on one another, whether in the way of attraction or repulsion. That there were points of strong likeness between the two sculptors is becoming more and more evident; but we are as yet scarcely in a position to say which was the leading spirit. And if, as is likely, Scopas influenced Lysippus, it is also likely that Lysippus in turn influenced Scopas.

If then the range of Lysippus' works stretches from B.C. 372 to 320, it cannot be maintained that the Agias statue represents his earliest work. For in that case, when the group of Daochos was executed, in B.C. 339-331,³⁰ he was decidedly over fifty years of age. He can hardly, after that, have so far changed his style as to produce a statue so different from the Agias as is the Apoxyomenos. After sixty, very few painters or sculptors have radically altered their style; and in the case of Lysippus we must not, without good grounds, assume such a change.

It will be observed that the position which I am criticising is the view that the Apoxyomenos, though confessedly a work of the Roman age, and a copy in marble of an original in bronze, yet faithfully reproduces a lost work of Lysippus, and may be considered in all its details as the type of his style. It is however evidently possible to hold a somewhat different view,³¹ that the Roman copyist, while preserving the general type and attitude of the Lysippic statue, has in some degree modernized the anatomy. In support of this theory, there has been cited a torso at Athens³² of a figure in the same attitude as the Apoxyomenos, but treated in a much simpler and drier style. This might very well be taken, and in fact has been taken, to prove that the most striking features of the Apoxyomenos are due to some artist of the Neo-Attic School, some such master as Glycon or Cleomenes. I must at once allow that those who adopt this view are thereby shielded from such parts of the preceding argument as have reference to the detailed and anatomic character of the surface of the Apoxyomenos. My polemic has been directed against taking the Apoxyomenos, *as it stands*, as an index of the style of Lysippus. This is what has been commonly done by archaeologists; and it is against this that I appeal. If it be held that the statue, as it stands, only bears the same relation to a bronze original by Lysippus as the Herakles of Glycon bears to a possible Lysippic Herakles, then we have a view which is much more reasonable, and much more defensible.

At the same time, it appears that there are still some features in the Apoxyomenos for which this theory does not well account. It is not only the surface of the Apoxyomenos which is later in character than the age of Alexander, but also the whole build of the figure and its composition. On this subject Prof. Loewy has some good remarks. He observes that the author of the Apoxyomenos (whom he naturally calls Lysippus) was the first of

³⁰ This is the date at which Preuner arrives (*Ein Delphisches Weihgeschenk*, p. 12) after careful investigation. M. Homolle ventures to determine the date still more precisely to

338-334; *B.C.H.* xxiii. p. 440.

³¹ This view has been taken by U. Koehler, *Ath. Mitth.* 1877, p. 57 and others.

³² *Ath. Mitth.* 1877, Pl. IV.

Greek sculptors to compose works really in three dimensions. 'In the naturalistic rounding of his figure, many aspects pass undistinguishably into one another; he exercises in the front view full freedom of foreshortening, not only of the trunk, which bends in various directions, but of the whole figure, arms and legs stretching boldly into the void. With this, complete success is secured in dealing with the round.³³ But this freedom from the use of only two planes certainly does not belong to the contemporaries of Lysippus; and it seems clear that it is a mark of the age of expansion after Alexander the Great. And this feature cannot, like the peculiarities of the surface, be abstracted from the statue, which is full of ease and motion, one aspect of it fitting in with another. I am therefore much more inclined to think that the statue, as it stands, is a fairly correct reproduction of a Greek original of a time somewhat later than Lysippus. Of this view I will say more in the final section.

III.—*Ancient Critics on Lysippus.*

I must briefly speak of the statements of ancient writers in regard to the style of Lysippus.³⁴ Such statements are usually of a very superficial character; but we cannot neglect them, more especially as Lysippus lived just before the rise of the literary school of Alexandria, and was naturally the subject of much criticism.

I have already touched on the chief of these statements, that Lysippus introduced changes into the recognized proportions of the human body. This assertion is doubtless based on fact. But other assertions, and more especially such as seem to imply that Lysippus was a naturalistic sculptor, require a further and a more sceptical investigation. For example we have the assertion of Quintilian 'Ad veritatem Lysippum ac Praxitelem accessisse optime affirmant.' We cannot believe Quintilian if he means by this that Lysippus was a realist in the modern sense of the word, closer to unimproved nature. In Quintilian, Praxiteles is coupled with Lysippus, and how little of a realist Praxiteles was, we all know. Of course through the whole history of ancient art down to its decline there went a careful study of nature, so that in some respects sculpture may be said to have moved nearer to life. But there were other tendencies, quite as strong, which preserved its ideal character. It is probable that great sculptors never fully realize how much of themselves and of current ideas they put into their works. Often idealists are quite convinced that they are only following nature: what they add to nature they add unconsciously, and because they cannot help it.

On the whole, the ancient testimony as to Lysippus establishes his ideal character. The man who represented Alexander to his own satisfaction, and laid stress upon his leonine and manly air would not be a realist. A Cromwell might tell a painter to copy his scars and wrinkles; but Alexander was

³³ Loewy, *Die Naturwiedergabe*, p. 49; so also Klein, *Geschichte* ii. p. 348.

³⁴ These are all to be found in Overbeck's *Schriftquellen*, pp. 287 and foll.

of quite another type, and the main object of his ambition was to rise above the ordinary human level.

There is a story that Lysippus was induced by a saying of the painter Eupompus to take nature rather than any master as his guide. But to this story, as I have already observed, little value attaches. In fact the opposite tendency, the academic, is insisted on by better authority. Cicero says that Lysippus spoke of the Doryphoros as his master, and Pliny says that he paid great attention to the theory of proportion.

Pliny also records that Lysippus excelled 'capillum exprimendo.' Now of all parts of the body the hair least admits of naturalistic treatment, since its forms are constantly varying, and anything but plastic. But on the other hand the hair can be used to give character and expression to a head. In portraits of the early Hellenistic age of philosophers and the like, the hair and beard are treated with great skill, and used to give character. Probably Lysippus excelled in this matter, which had been neglected by his predecessors and even his contemporaries. The hair is a very noteworthy feature in such heads as the Zeus of Otricoli, the bearded Herakles of the British Museum, and the Poseidon of the Lateran, all of which may be more or less Lysippic. In portraits of Alexander, as we shall see in the next section, the hair is usually treated with expression. On the other hand the hair of the Apoxyomenos, though worked out with some care, is decidedly wanting in character and expressiveness.

Another statement of Pliny is that Lysippus shewed great vigour in detail: 'argutiae custoditae in minimis quoque rebus.' But argutiae does not in the least imply minute accuracy or naturalism in the rendering of detail: it implies animation or vividness throughout, much the same thing as Propertius means when he speaks of the 'animosa signa' of Lysippus. Animation seems to have been as striking a feature in Lysippus' statues as in those of his contemporary Scopas.

Finally we have in Pliny the reported statement of Lysippus himself, that his predecessors depicted men quales essent, while he depicted them quales viderentur esse. Few passages have lent themselves to more discussion than this. Some archaeologists have regarded it as an affirmation of the impressionist character of Lysippic art; some as a statement of his allowance for perspective; some as a declaration of his idealism. It would take too much space if I endeavoured to discuss this passage in detail; I will only briefly indicate my own view, which is that the passage must not be considered in isolation, but in connexion with other art-criticisms of Greek writers. We may fairly trace back most of these to some germ in the *Poetics* of Aristotle, who may be said to have set criticism going, and who formulated those phrases about ethos and pathos, idealism and naturalism, which formed the stock in trade of lesser men. In the *Poetics*,³⁵ Sophocles is made to say that he represented men *ὅσους δεῖ ποιεῖν*, while Euripides represented them *οἷοι εἶσιν*. Here it can scarcely be doubted that Sophocles is meant to

³⁵ Compare the paper of Prof. Kekule in the *Jahrbuch*, 1893, pp. 39-51.

contrast his own ideality with the comparative realism of Euripides. I am disposed to think that under the Plinian phrase, *quales viderentur esse*, there lurks some Greek expression to the effect that Lysippus also was an idealist. The words *οἷους εἶκεν εἶναι* have been suggested as the phrase which Pliny has misrendered, and the suggestion is at all events ingenious. At the same time the view that he claimed to have introduced more perspective into sculpture has much in its favour. In any case, to escape from an interminable discussion, I think it clear that whatever Lysippus may assert in regard to his own style, he at all events declares that it differs from that of his predecessors, in that he does not represent men just as they stand. Whether his improvement consisted in introducing a better canon of proportions, or in treating details in a more characteristic way, it is less easy to say. But he certainly disclaims realism.

In the interpretation then of statements of ancient writers, as in the question of date, the attribution of the *Apoxyomenos* to Lysippus has been a misleading light, and interfered with their natural rendering. Archaeologists have found an affirmation of the naturalism of Lysippus in passages which do not bear that meaning.

IV.—*Lysippus and Alexander.*

We now reach my next contention, which is, that the whole question of the portraiture of Alexander the Great has been confused, and drawn, so to speak, out of focus, by the inference of the *Apoxyomenos*. We have had two great monographs upon the portraits of Alexander, by Koepp and by Schreiber,³⁶ both containing much learning and written with ability, which have for this reason fallen short of success. The still more recent work of Bernoulli, on the other hand, being less dominated by a theory, avoids most of the mistaken conclusions into which this *ignis fatuus* has led many able archaeologists. The whole history of this investigation is an illustration of the danger of piling fresh theories upon a theory which is at the time accepted, but is liable to be called in question. The only safe ground for a theory is positive or documentary evidence; and if it is allowable and necessary sometimes to admit as working hypotheses views which have only a moderate degree of probability, it is essential that their doubtful character should be always kept in mind, and that no attempt should be made to use them as supports for further speculative constructions. One is reminded of what has sometimes happened in English building. The Norman builder has sometimes built a low wall on a small but sufficient foundation. A subsequent builder has sometimes raised the height of the wall without examining that foundation, and as a result the whole has collapsed.

A current misconception, piled upon the top of those already mentioned,

³⁶ F. Koepp, *Ueber das Bildniss Alexanders des grossen*, 1892; T. Schreiber, *Studien ueber das Bildniss Alexanders des grossen*, 1903; J.

Bernoulli, *Die erhaltenen Darstellungen Alexanders des grossen*, 1905.

proceeds from a supposed likeness between the head of the Apoxyomenos and the Azara head of Alexander in the Louvre to deduce the conclusion that this Azara head is Lysippic, and in fact preserves for us a copy of one of the most noted of the Lysippic portraits of Alexander, the Alexander with the spear. To begin with, the likeness between the two heads is but superficial, and is no safe basis for a theory.³⁷ And further it seems to me extraordinary that anyone who has read the passage in Plutarch as to Lysippus' portraits of Alexander can find a copy of one of them in so



FIG. 7.—AZARA HEAD OF ALEXANDER.

miserable and characterless a work of art as the Azara portrait. 'Lysippus alone,' says Plutarch, 'incorporated the character of Alexander in bronze and gave his body its indwelling valour: others, wishing to render the bend of his neck, and the melting look of his eyes, failed to preserve what in him was manly and leonine.' Plutarch further says that Lysippus represented

³⁷ Bernoulli observes that the points of difference are more notable than those of like-

ness. *Die erhaltenen Darstellungen Alexanders*, p. 24, cf. Figs. 6 (above) and 7.

Alexander as gazing up towards the sky with proud and presumptuous air. What of all this is there in the dull Azara portrait? (Fig. 7).³⁸

But it has been maintained that we have a definite reason for connecting the Azara head with Lysippus because it resembles the head of a small bronze figure which may reasonably be regarded as a reduction of Lysippus' Alexander with the spear.³⁹ This bronze is figured by Schreiber.⁴⁰ It comes from Egypt. I would readily allow that this statuette may well be a reminiscence of one of the Lysippic portraits of Alexander; but it is not legitimate in such a case to assume that it is a close copy of the statue. And I agree with Bernoulli that the minuteness of the head of the statuette, and the oxidation which it has undergone, make it a very unsound basis for any theory. What is quite clear is that the Azara head could not be placed upon any such statue as Plutarch describes without incongruity.

I venture to think that the whole question of the portraiture of Alexander has been placed on a false basis through what may be termed a mistake in psychology. Archaeologists have been misled by the tendencies of modern art, and have not clearly seen how much there is in ancient portraiture of idea and belief, in proportion to visible fact. They underrate the extreme idealism of fourth century art. The attempt to recover the actual traits of the Macedonian hero, as they might appear in a photograph, is a hopeless quest. No one at the time looked at Alexander with the cold and critical eyes of science. All that we can hope to recover is the mental, rather than the visual, images which those about Alexander formed of him. Different sculptors, we are told, formed different types of the hero, each doubtless according to the formed style of his art. Foremost among them stood Leochares and Lysippus. Alexander preferred the Lysippic rendering of himself because he discerned in the art of Lysippus a kinship to his own manly and ardent nature. Some of the sculptural types of Alexander we may hope to identify amid the numerous extant statues and statuettes which are more or less intended to represent the great king. We can throw them into classes. But we shall scarcely be able to say how nearly they resemble the hero whom they portray.

In fact in portraiture, as in the representation of limb and muscle, the turning point came about the year B.C. 300. Every one who is accustomed to dealing with Greek coins knows that we do not find on them strongly marked and naturalistic portraits until the third century. In sculpture the same thing holds. The break comes between such a portrait as that of Sophocles of the time of Lysurgus (B.C. 337—323) with its noble ideality, and such a portrait as that of Demosthenes of the time of Polyeuctus (B.C. 280), which combines this idealism with a closer approach to fact and history.

I do not think that we can yet venture to select one among the many portraits of Alexander which have come down to us as definitely Lysippic;

³⁸ From a cast.

Iside et Osir. 24.

³⁹ This statue is mentioned by Plutarch, *De*

⁴⁰ Pl. VI. of his work.

but the direction in which we should look is not towards the Azara head,⁴¹ but rather towards the portrait on the coins of Lysimachus (Fig. 8),⁴² and the head of Alexander in the British Museum (Fig. 9). These have indeed no kinship with the head of the Apoxyomenos; but they have a sort of consinship to the head of Agias, and they correspond far better with the words of Plutarch.

We may put the matter broadly thus: the coins of Lysimachus give us the traditional portrait of Alexander as his younger contemporaries thought of him. And this popular conception would certainly be embodied in the portraits of Lysippus. There is a strong likeness between the coins and the British Museum head; but none between them and the Azara head. It follows that the British Museum head is nearer to Lysippus; and it conforms to the passage of Plutarch. At first sight it strikes one as Scopaiic, that is to say, like the Tegea heads; but taking the head of Agias as Lysippic, we may find in it in some respects, notably in the form of the eyes,



FIG. 8.—COIN OF LYSIMACHUS. (Enlarged.)

a still nearer likeness to the British Museum type. I cannot but regard the theory of Koepf and Schreiber that the Azara head is a naturalistic portrait of Alexander by Lysippus as a most unfortunate one. The Azara head has some appearance of naturalism. Even Bernoulli thinks it naturalistic. In my opinion the pooriness of the work, the restorations (nose), and the want of symmetry between the two sides of the head, give it an appearance of naturalism which a closer examination scarcely justifies. If however it be an exact portrait of Alexander, it is of Alexander at the very end of his life. It is in the last degree unlikely that the aged Lysippus would have made a journey to Babylon to make a fresh portrait of the king. Kings like to go down to posterity at their best and not at their worst.

⁴¹ So Bernoulli, *Die erhaltenen Darstellungen Alexanders*, p. 25 'Will es mir nicht recht in den Sinn, dass uns in dem Pariser Hermenbildniss der Kopftypus des berühmtesten Werkes

des Lysippos erhalten sein soll.'

⁴² From a cast. The coin is in the British Museum.

And it may be observed in this connexion that the portraits by Lysippus of which we know anything were of the boldest and least naturalistic type. The portrait of Agias represents a man who had been dead for about a century. The Lysippic portrait of Pulydamas was posthumous. In the group of the horsemen who fell at the Granicus set up at Dium Lysippus, according to Pliny, 'imagines summa omnium similitudine expressit'; but no one has suggested that Lysippus saw and copied the dead bodies, and how else could he get exact likenesses? The phrase of Pliny



FIG. 9.—HEAD IN THE BRITISH MUSEUM.

only shews that the Roman critics like many moderns could not discern between life-likeness in a portrait and a close adherence to the original.

M. Collignon has some good remarks on the supposition that Lysippus was a naturalist in portraiture. 'Peut-il être considéré comme l'initiateur de l'évolution qui se manifeste avec tant de force dans l'art hellénistique, et introduit dans le portrait un si curieux accent de vérité? Il serait imprudent

de l'affirmer. Au IV^e siècle, le portrait réaliste n'existe pas encore.'⁴³ This must be taken as a revision of the opinion which M. Collignon expressed some years ago:⁴⁴ 'C'était une nouveauté de rompre avec l'idéal de perfection du V^e siècle, et d'abandonner le culte de la beauté conventionnelle pour se rapprocher de la vérité particulière. C'est surtout dans les traits du visage que Lysippe exprime le caractère individuel.' In this change of view other archaeologists may well follow M. Collignon.

V.—Conclusions.

My position then is that a determination to regard the Apoxyomenos as the model of Lysippic work, and the notion that Lysippus must have been a realist, have acted perniciously in pushing Lysippus out of his proper place in the history of Greek sculpture, both as regards his date and his style, and that the time has come for a fresh study of the whole question. Such fresh study would probably have led to no trustworthy result, apart from the discovery of the Agias, which gives us just the inscriptional evidence which we wanted, and enables us to start on a more trustworthy road than that which has hitherto been trodden.

Taking the Apoxyomenos as it stands, I would maintain the view that it fairly represents, not of course the later Hellenistic age, but the period after B.C. 300, when the knowledge of anatomy was fast coming in.⁴⁵ And although I deny any *close* connexion with Lysippus, I would certainly not call in question its ultimate derivation from the bronze school of Sicyon, of which Lysippus was the most noted member.

What is academic in the Apoxyomenos, the careful proportions, the occasional conventions, connect it with the school of Sicyon, while the anatomic knowledge and the boldness of perspective indicate the third century, and mark the road which ends in the Borghese fighter and the hanging Marsyas.

But while disputing any close connexion between Lysippus and the Apoxyomenos, I do not deny that in some respects archaeologists have formed a satisfactory view of the position of this Master in the history of sculpture. It is of course right to contrast the slender proportions which Lysippus introduced with the sturdier and less graceful outlines of the statues of Polycleitus. And it is quite right to consider Lysippus as in a broad sense the author of those manly and nude standing types of the gods which come in about the middle of the fourth century, such as the British Museum statuette of Zeus from Paramythia,⁴⁶ and the statue in the Lateran which represents Poseidon standing with his foot resting on the prow of a ship.⁴⁷ He may also be fairly regarded as responsible for the heads of Helios which

⁴³ *Lysippe*, p. 92.

⁴⁴ Text to Rayet's *Monuments de l'art antique*, No. 55.

⁴⁵ M. Collignon calls attention to the close likeness between such works as the Apoxyo-

menos or the Herakles of Glycon and the terracottas of Smyrna of the third century. *Lysippe*, p. 123.

⁴⁶ *B.M. Bronzes*, Pl. VI. No. 274.

⁴⁷ Brunn's *Denkmäler*, Pl. CCXLIII.

resemble Alexander, and for the later type of Zeus' head, which appears in a mannered and extreme form in the mask from Otricoli.⁴⁸ No doubt in our museums there are many other works which a careful search would discover, and which we could now, by the evidence of the Agias, attribute to the school of Lysippus. As the Master worked only in bronze, it is most unlikely that any of his actual works will be recovered, or even any marble copy which we can implicitly trust.

I do not at present propose to follow up the clue given to us by the Agias, or to endeavour to select among extant statues those which have the best claim to be by the author of this portrait. I have already suggested⁴⁹ that it is impossible to divide the Lansdowne Herakles from the Agias; and to that view I certainly adhere. But I shall not go further in this matter. The conjectural attribution of extant statues to great masters of the fifth and fourth centuries has been carried of late years far beyond the bounds of prudence and moderation; and although it is a far safer task to attribute statues to Lysippus than to almost unknown masters like Strongylion or Phradmon, yet it is a task which can well wait.

It has been much the custom among archaeologists, and still more among art-critics without archaeological training, to speak of the age of Lysippus, the fourth century B.C., as a time of softness and decadence. No doubt decay and corruption set in at Athens in that century, with the decay of political energy and religious belief. And in the works of Praxiteles, for all their consummate beauty and technical mastery, we may note the beginnings of a decadence. But in the sculptures of Scopas, so far as they are known to us, there breathes a remarkable force and ardour. And Lysippus was pre-eminently a manly and spirited artist. While Athens was entering on the path of decay, the policy and the victories of Epaminondas had given a fresh lease of life to the people of Peloponnesus. Great cities, Messene and Megalopolis, arose with their public buildings and their temples. And many of the other cities, such as Mantinea and Aegium, became more populous and powerful. It would be absurd to speak of any decadence in Peloponnesus at this time. Rather, the loosening of the Spartan yoke had made the towns rise in a generation to a far higher level of culture and power. These external conditions are reflected, as is often the case, in the activity of the greatest Peloponnesian artists — Euphranor, Nikias, Apelles, Damophon, and most notably Lysippus. It might almost have been called a new branch of the tree of Hellenic art, which suddenly flowered and bore fruit. And from it fresh shoots were transplanted into the vast empire which was founded beyond the sea by Alexander.

But the real expansion of Hellas came, not in the days of Lysippus, but in the time of his school. And in regard to this I must add a few words.

⁴⁸ Wolters, *Bausteine*, p. 594.

⁴⁹ *J.H.S.* 1903, p. 129.

Lysistratus, the brother of Lysippus, is said by Pliny to have been the first to take plaster casts from the face, from which he made wax moulds. He is also said to have aimed at realism in portraits. Surely, if this is told us of Lysistratus, we are justified in supposing that it does not apply to his far more celebrated brother. Lysistratus was probably a younger brother, with less strongly fixed notions of style. But even in his case we can scarcely suppose such a knowledge of anatomy as is displayed in the Apoxyomenos. It was the skin, not that which lies beneath, that he seems to have studied. It is likely enough that in the next generation, the school of Lysippus, carrying on the tendencies of Lysistratus, would profit by the anatomical studies of Alexandria. There are other respects in which they would almost certainly move with the general stream of art. Their perspective would become freer, and the last traces of the two-plane restrictions would disappear.

It seems to me that the path thus laid down would lead the followers of Lysippus to such a work as the Apoxyomenos. And there are other works of a not dissimilar character, which have already by some writers been attributed to the school of Lysippus.

If we look round our Galleries in order to find parallels, it will not be easy to find any nearer than the so-called Jason of Munich⁵⁰ and the Louvre,⁵¹ which is really a Hermes fastening his sandal, and the seated Ares of the Ludovisi gallery. I have not been able minutely to examine the details of these works; but in all, the boldness of attitude, the length of limb, and the freedom from the two-plane convention is conspicuous. The Ares statue in particular furnishes an interesting parallel to the Apoxyomenos. Some thirty years ago it was usual to regard it as a copy of an Ares of Scopas. In 1885 Dr. Wolters, an excellent judge, had observed the affinities of the two statues both in style and in head,⁵² and had naturally attributed the Ares to the school of Lysippus. Overbeck observed in 1894,⁵³ 'in recent years many writers have set forth considerations which leave no doubt that we have to do with a work made in the Hellenistic age under the influence of the art of Lysippus.' In particular the little figure of Eros, which is associated with this Ares, is of unmistakable Hellenistic type.

It is observable that the proposal of the present paper is to treat the Apoxyomenos as the Ares Ludovisi has been treated by a general consensus of archaeologists: to deny its right immediately to represent a great master, but to leave it as representing the later development of a fourth century school.

It is a decidedly later stage of such tendencies which is represented by such statues as the wonderful fighter of Agasias in the Louvre. I have

⁵⁰ Clarac v. 814, 2048.

⁵³ *Geschichte der griech. Plastik*, Ed. 4,

⁵¹ Brunn and Arndt, *Denkmäler*, Pl. LXVII. ii. 17.

⁵² *Bausteine*, p. 452.

already observed how in details, notably in the shape of the foot, this figure carries further the peculiarities of the Apoxyomenos. But we have to do here with a work of Asiatic origin and eclectic style.

The road which leads to the statue of Agasias would seem to have been pursued by Lysistratus, and probably by the sons or pupils of Lysippos, but scarcely by himself. We may perhaps find a hint of this in Pliny's statement that Euthykrates rather attained to the *constantia* of his father than to his *elegantia*, and preferred the *austerum genus* to the *juvenculum*. The phrases are not easy to interpret; but we may judge that Euthykrates was deficient in the charm which was conspicuous in the works of Lysippos, and made up for it by hard study. The works of Euthykrates are of the same kind as those of Lysippos, Alexander, a Herakles, horsemen, quadrigas, and the like. Another son or pupil, for Pliny does not distinguish them, Boedas, made an *adorans*, a figure which some have seen in the 'Praying Boy' of Berlin, which does, in fact, seem to belong to this school.⁵⁴ A third pupil Daippos, was so far as we know exclusively a sculptor of athletes; we hear of several of his works, among others of a statue called the *Perixyomenos*. Is it possible that our statue, which we call the Apoxyomenos, is really a copy of this? The Plinian date of Daippos, Ol. 121 (B.C. 296) would be rather early for the statue, but by no means impossible. It is not, as we have already seen, by any means purely naturalistic; in some points it connects itself with the fourth century, as in others with the schools of Hellenistic art.

What would be the difference between an Apoxyomenos and a Perixyomenos? I have made inquiry of eminent Greek scholars on this point, but they have nothing definite to say. The Apoxyomenos should be a man scraping away the sand like a skin, the Perixyomenos a man scraping himself all round. As the Roman amateurs applied the names to two well-known statues, one would think that there must have been in action or attitude of these statues something to justify the two prepositions, *περι-* and *ἀπο-*. However that be, it seems clear that the word perixyomenos would well suit the extant figure. At the same time, it must be observed that this attribution is merely suggestive and conjectural, and cannot serve as a basis for any further theories.

As this paper has been rather long and intricate, it may be well here briefly to sum up the conclusions which it reaches. We started from the position that the Agias and the Apoxyomenos cannot both reflect the style of Lysippos; and we saw good reason to think that it is the Agias which has by far the best claim to this position, the Apoxyomenos shewing clear marks of the style of the age succeeding Alexander the Great. We next observed

⁵⁴ Prof. Loewy has insisted on likenesses, Apoxyomenos and the 'Praying Boy,' *Röm. Mitth.* Pls. XVI.-XVII.

that the assumed connexion of this latter work with Lysippus had had the effect, first of placing Lysippus at too late a date in the history of Greek sculpture; and second, of confusing the question of the portraiture of Alexander. Finally, it appeared that the Apoxyomenos is probably a copy, not of a work of Lysippus himself, but of one of his pupils, or someone belonging to his school, who worked in the third century.

P. GARDNER.

A FRAGMENT OF THE 'EDICTUM DIOCLETIANI.'

DURING a journey in the spring of last year along the east coast of the Messenian Gulf I took an impression of a fragment of a Latin inscription built into the north wall of the Church of Hagios Taxiarches in the village of Oetylus.

The fragment is of white marble and is broken on every side. It measures .47 m. in height and .21 m. in width. The letters measure .013 m.

| | |
|----|-------------------|
| | PROUE |
| | STUM |
| | CAEFC |
| | SUSQU |
| 5 | TIBUSADQ |
| | IQUISINGU |
| | EETIAMPO |
| | S NTCONSE |
| | ICE CENTENS |
| 10 | AUARITIAEMOD |
| | S ICOMMUNIS |
| | EDIAMETIAMIPS |
| | ANDEMPRO |
| | MCOMPULITEXF |
| 15 | DIFFICILE SIT TOT |
| | TEMSPICIALIAR |
| | ELARIUSTIOR |
| | CONSTITU |

b = b

q = q

| | |
|---|--|
| | [abundantiam rebns] prove[nire. Et quibus semper] |
| | [studium est in que]stum [trahere etiam beneficia] |
| | [divina ac publi]cae fe[llicitatis affluentiam] |
| | [stringere rur]susqu(e) [anni sterilitate de] |
| 5 | [seminum iac]tibus adq[ue institorum officiis] |
| | [nundinar]i; qui sing(u)[li maximis divitiis] |
| | [diffuentes, qua]e etiam p(o)[pulos adfatim expl-] |

- [ere potuis](s)[e]nt, conse[ctentur peculia et]
 [laceratr](i)c(e)[s] centens[imas persequantur ;]
 10 [eorum] avaritiae mod[um statui, provinci-]
 [ales no](s)[tr]i, communis [humanitatis ratio per-]
 [suadet. S]ed iam etiam ips[as causas, quarum]
 [necessitas t]andem pro[ficere nos diu prolatam]
 [patientia]m compulit, ex(p)[licare debemus ut,]
 15 [quamvis] difficile sit tot[o orbe avaritiam]
 [saevien]tem speciali ar[gumento vel facto]
 [potius rev]elari, iustior [tamen intelligatur]
 [remedii] constitu[tio, cum intemperatissimi]
etc.

It forms a fragment of the well-known '*Edictum Diocletiani de pretiis rerum venalium*,' a bi-lingual inscription in Latin and Greek, promulgated in 301 A.D., portions of which have been discovered in various parts of the Greek world as well as in Egypt. Two such fragments have been already published in this Journal, one by Mr. W. Loring from Megalopolis (*J.H.S.* vol. xi. (1890) pp. 229 ff.), and another from Corone, on the side of the Messenian Gulf opposite to Oetylus, by Mr. M. N. Tod (*J.H.S.* vol. xxiv. (1904) pp. 195 ff.).

The standard work on this inscription is Mommsen-Blümner, *Der Maximal-tarif des Diocletian* (Berlin, 1893). For the Bibliography of recently discovered portions of the Edict I would refer to Mr. Tod's article.

The fragment before us is already known, and forms part of the Introduction to the decree (Mommsen-Blümner, *op. cit.* pp. 7-8, ll. 23-29). The greater part of the passage in which it occurs is covered by the fragment from Stratonicea (Eski Hissar) in Caria, the largest portion of the Edict yet discovered.¹ Portions of it are also found in the Egyptian fragment,² and in the fragment from Plataea.³

The lines, as would naturally be expected, are of different lengths in the different copies. In the Oetylus fragment they are scarcely half the length of those in the other copies. In correctness the inscription before us contrasts favourably with the only other copy from Greece proper, that from Plataea, which is full of verbal inaccuracies.

Two other Laconian sites besides Oetylus have yielded fragments of the *Edictum Diocletiani*. At Gytheion Foucart in 1868 discovered a fragment of the Greek version,⁴ while a Latin fragment was found on the same site by Mr. A. N. Skias in 1892.⁵ Secondly at Geronthrae (Geraki) five Greek fragments were found by Le Bas and a sixth by Purgold.⁶

¹ *C.I.L.* iii. pp. 804-811: Leake, *Transactions of the Royal Society of Literature*, 1827, pp. 181-204. It was first discovered by Sherard, British Consul at Smyrna, 1702-1718.

² *C.I.L.* iii. pp. 802, 803: a facsimile of a portion of it is given by Hübner, *Exempla script. epigr. Lat.* (Berlin, 1885).

³ *C.I.L.* iii. p. 1913: *Papers of the American School at Athens*, v. (1892) pp. 233-244.

⁴ *C.I.L.* iii. p. 823.

⁵ *Ath. Mitth.* xvii. (1892) p. 156 ff: *C.I.L.* iii. p. 1915.

⁶ Le Bas-Foucart, nos. 229-232: *C.I.L.* iii. 816-819 and 1925.

While Gytheion was naturally chosen as the most important town on the Laconian Gulf and Geronthrae as the most central city of Eastern Laconia, Oetylus was doubtless chosen because of its central position on the west coast of the Messenian Gulf. The very fact, however, that it was so chosen points to the conclusion that it was still a place of some importance in the fourth century A.D. This is interesting in view of the fact that its name dates back to the Homeric age,⁷ and has persisted without change to the present day.⁸

In conclusion I wish to thank Mr. F. Haverfield for kindly sending me a conjectural arrangement of the text.

EDWARD S. FORSTER.

⁷ It is mentioned in the Catalogue of the Ships (*Il.* ii. 585).

⁸ On the Topography and Antiquities of Oetylus, see *B.S.A.* vol. x. p. 160.

WRESTLING.

(Continued from p. 31.)

II.

[PLATES XI., XII.]

A.—Preliminary Positions, and Various Wrestling Terms.

THE attitude adopted by the Greek wrestler before taking hold, as described by Heliodorus,¹ and frequently represented in art, was very similar to that in use at the present day. Taking a firm stand with his feet somewhat apart and knees slightly bent, rounding (*γυρώσας*) his back and



FIG. 1.—PANATHENAIC AMPHORA. B.M. B 603.

shoulders, his neck advanced but pressed down into his shoulder blades, and his waist drawn in (*σφηκώσας*), he tried to avoid giving any opening (*λαβή*) himself, while his outstretched hands were ready to seize any opportunity offered by his opponent.

¹ *Aethiop.* x. 31; cp. Ovid *Met.* ix. 33, Lucan *Phars.* iv. 617, Stat. *Theb.* vi. 850. The position is shown in an Attic grave relief of Agacles, Schreiber *Atlas* xxi. 1; in vase-paintings, Panofka *Bilder und Leben* i. 7, *Arch. Zeit.*

1878. 11; and above all in the two well known bronzes at Naples, formerly described as diskoboloi, but really representing wrestling boys ready for the contest.

Various methods of attack are enumerated by Plutarch. *Symp.* ii. 4. *μόνους δὲ τοὺς παλαιστὰς ὁρῶμεν ἀλλήλους ἀγκαλιζομένους καὶ περιλαμβάνοντας καὶ τὰ πλείστα τῶν ἀγωνισμάτων ἐμβολαί, παρεμβολαί, συστάσεις, παραθέσεις συνάγουσιν αὐτοὺς καὶ ἀναμίγνυνται ἀλλήλοις.* These terms, arranged in contrasted pairs, denote the various positions and movements of wrestlers before they take hold. *σύστασις* denotes the position frequently depicted on vases (Figs. 1, 3, 7, 9, 11, 12, 13, Pl. XII. c), where the opponents stand square to one another and prepare to take hold somewhat in the style of Westmorland and Cumberland wrestlers, 'leaning against each other like gable rafters of a house,'² or 'butting against each other with their foreheads like rams,'³ or 'resting their heads on each other's



FIG. 2.—THESEUS AND CERCYON. R.-F. KYLIX. B.M. E 84.

shoulders.'⁴ In the position described as *παράθεσις* the wrestler instead of facing his opponent squarely turns sideways to him in order to obtain a hold from the side rather than from the front. The attitude and the consequent hold we shall find represented especially in the pictures of Theseus and

² Homer *Il.* xxiii. 712.

³ Lucian *Anacharsis* 1. M. de Ridder, *Dar.-Sagl. s.v. lucta*, takes Lucian's words seriously and draws a thrilling picture of a 'butting-match'! 'L'une des manœuvres favorites' he says 'était le heurt des fronts l'un contre l'autre, et les deux têtes une fois en contact la pesée graduelle de la première sur la seconde.' Hence he concludes 'l'adversaire le moins résistant se trouvait rapidement renversé sur le

dos.' What would Lucian have said to such a comment on his words!

⁴ Philostrat. *Vit. Soph.* p. 225 δ Πολέμων προσῆλθε τῷ Διονυσίῳ καὶ ἀντερείσας τὸν ὄμον ὥσπερ οἱ τῆς σταδιαίας πάλης ἐμβιβάζοντες κ.τ.λ. *σταδιαίος* here is evidently used in the sense of, perhaps in mistake for, *σταδαίος*, and means not, as Martin Faber says, 'belonging to the stadium' but 'upright.' For the position v. Noel des Vergers, *L'Etrurie* xxxvii.

Cercyon (Fig. 2), and it is clearly indicated in the Oxyrhynchus papyrus⁵ the first intelligible order of which is *παράθες τὸ μέσον καὶ ἐκ κεφαλῆς δεξιᾷ πλέξον*. 'Turn your body sideways to your opponent and grip him by the head with your right hand.'

A similar distinction exists between *ἐμβολή* and *παρεμβολή*, terms which denote movements rather than positions. In wrestling *βάλλω* and its compounds seem always to express some movement of attack either with arm or leg. For example, in the papyrus we find *ὑπόβαλε τὴν δεξιάν* of an arm movement, and *βάλε πόδα* of a leg movement. In the epigram quoted in my last article⁶ *ἐμβάλλω* appears to be used of a direct attack where one wrestler seizes the other by the body and tries to force him backwards, and the same word is used in Lucian's *Asinus*⁷ in a context which perhaps suggests a leg movement. The chip described in the last lines of the papyrus seems very much like the modern 'hank,' in which one wrestler trips the other by hooking his leg round the inside of his opponent's leg, *σὺ βάλε πόδα σὺ διάλαβε· σὺ ἐπιβάς ἀνάκλα· σὺ προστὰς ἀνάνευε*. The movements of the two pupils whom we will for convenience call *A* and *B* are as follows:—*A* advances his leg to trip *B*; *B* seizes *A* round the waist; *A* throwing his weight upon *B* tries to force him backwards; *B* resists by leaning forward with all his weight. If we can compare this passage with the following description of the hank, there can be no doubt of the correctness of our interpretation. 'Immediately the hold is taken, the wrestler clicks his opponent's right leg with his left and pulls him backwards, generally falling on him with his weight. The only way to stop the hank is to lean forward, obtain a better hold, and hitch the aggressor over.'⁸

If *ἐμβολή* means an attack from the front, *παρεμβολή* means an attack from the side. In Lucian's *Ocyrops* it clearly denotes a leg movement. Ocyrops, who is suffering from gout but will not acknowledge it, among various excuses for his lameness says

*οὐκοῦν παλαιὼν ὡς θέλων παρεμβολὴν
βαλεῖν ἐπλήγην*—l. 60.

'I hurt my foot trying the *παρεμβολή*.' On the analogy of *ἐμβολή* this should mean the back-heel, a method of tripping an opponent by placing the foot behind his heel from the outside.

Another compound, *διαβάλλω*, which will be discussed later, appears to denote throwing the leg or arm across an opponent, and *προσβολή* according to Hesychius was a general term expressing *τῶν ἀθλητῶν ἡ συναφή καὶ ἡ κατοχή καὶ ἡ ὁρμή*.

Before we proceed to discuss in detail the various holds and throws it will be convenient to notice briefly certain common terms which occur constantly in wrestling descriptions but are of too general use to be considered technical terms. For the most part they explain themselves.

⁵ *Ox. Pap.* iii. 466.

⁶ P. 15 of this vol. *Anth. Pal.* xii. 206.

⁷ C. 10 *ὡς ἄμμα σφίγγε· ἐπ' ἀνακλάσας ἐμ-*

βάλλε καὶ σύνεχε.

⁸ Mr. Walter Armstrong, *Wrestling* (All England Series), p. 48.

Such words are ἔλκειν, ὠθεῖν, στρέφειν, λυγίζειν, ἄγχειν, ἀποπνίγειν, ἀνατρέπειν. Ἐλκειν is used of wrestlers who having obtained a grip try to tighten it by drawing their opponents towards them, a movement which is so essential to all 'upright wrestling' that ἐλκηδὸν μύχεσθαι is used as a synonym for παλαίειν.⁹ For the technical use of τὸ ἔλκειν to denote seizing the opponent's foot there is as I have already shown no evidence.¹⁰ Similarly ὠθεῖν merely denotes the opposite process of throwing one's weight upon an opponent in order to make him lose his balance backwards, and denotes nothing which is not allowed in modern wrestling. στρέφειν is used technically in the phrase ἔδραν στρέφειν,¹¹ but otherwise means simply 'to turn round' and is used of twisting an opponent round, twisting his arm back or turning oneself round. λυγίζειν is a general term for to twist or wrench. ἄγχειν and ἀποπνίγειν denote practices which belong rather to the pankration than to true wrestling, throttling or squeezing the breath out of an opponent being more useful for forcing him to acknowledge defeat than for throwing him. ἀνατρέπειν again means merely to upset, and there is no evidence for assigning it to any particular throw.

There are of course many purely technical terms and their interpretation is often very difficult. It seems better therefore to start by examining the evidence of the monuments, explaining as far as possible by this means the various technicalities as they occur. A convenient classification is suggested by Plato's definition of ὀρθὴ πύλη as consisting ἀπ' αὐχένων καὶ χειρῶν καὶ πλευρῶν ἐξειλήσεως.¹² I propose to take the various holds in this order and in connexion with them to consider where possible the throws to which they lead.

B.—Hand- and Armholds.

In endeavouring to obtain a hold, wrestlers continually seize one another by the wrist. This action, which is probably denoted by δράσσειν,¹³ is frequently represented on vases and coins. Often it is a purely defensive movement, to prevent an opponent from obtaining a neck- or bodyhold.¹⁴ And so we sometimes see a pair of wrestlers each holding the other by the wrist.¹⁵ Such symmetrical arrangements appealed to the less ambitious vase painter, and are therefore frequent on vases of the Panathenaic type. Sometimes one wrestler holds both his opponent's wrists.¹⁶ M. de Ridder gives a highly imaginative account of such a grip: 'Une simple pression

⁹ Hesiod ἀσπίς 302, οἱ δ' ἐμάχοντο πύξ τε καὶ ἐλκηδόν; cp. Pind. *Nem.* iv. 154.

¹⁰ P. 28 of this volume.

¹¹ v. *infra* p. 287.

¹² *Leg.* 796A.

¹³ Pollux cites it as a wrestling term. Cp. *Theoerit.* xxv. 145.

¹⁴ A good illustration of this may be seen in an amphora of Nicosthenes at Vienna published

in the *Vorlegeblätter* 1890-1, iv. 3 where the left-hand wrestler seizes with his right hand the left wrist of his opponent who is stooping down as if to seize him round the waist.

¹⁵ *Mon. d. I.* ii. 24; *Mus. Greg.* II. xvi. 2. a; Munich 495 (Pl. XII. c).

¹⁶ *Mon. d. I.* xi. 25, an Etruscan wall-painting from the Tomba degli Auguri; Gerh. *A. V.* 271, r.-f. kylix in Brussels.

exercée sur les bras les courbait en arrière et amenait sans résistance possible la chute du corps.' This grip was of course merely momentary, and often only defensive; it could be broken at any moment; and the wrestler must have been indeed a novice who succumbed so easily to this 'simple pression.' A more effective hold was obtained by seizing an opponent's arm with both hands, one hand seizing the wrist, the other gripping him at the elbow, or under the armpit (Figs. 3, 7, 9).¹⁷ This seems to have been a very favourite hold, if we may judge from the frequency with which it is represented; and it led to one very effective fall, of which we have also many illustrations. Rapidly turning his back on his opponent, the wrestler draws his arm over his shoulder, using it as a lever by which to throw him clean over his head. The throw, well known in modern wrestling as 'the flying mare,' is probably what Lucian describes as εἰς ὕψος ἀναβαστάσαι. As has been already

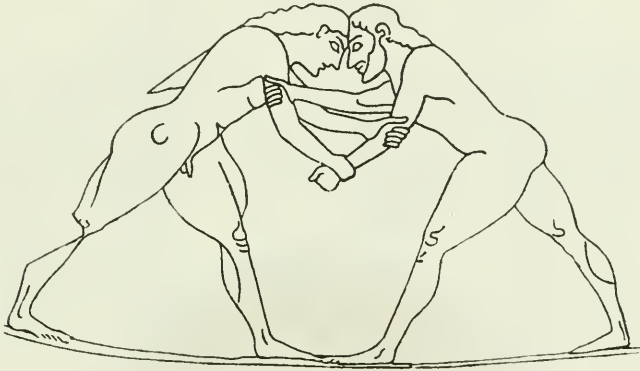


FIG. 3.—AMPHIARAUS AMPHORA. BERLIN. (From *Mon. d. I.* x. 45.)

mentioned,¹⁸ at the moment of executing it, the wrestler stoops forward, sinking sometimes on one knee, or both. On an Etruscan wall-painting¹⁹ we see the beginning of the throw. The prospective victor strides forward having swung his opponent off his feet, with his right hand he still grasps his wrist, his left hand he has transferred from his arm to the neck, in order to complete the throw. In another wall-painting,²⁰ the victor has sunk on both knees, having turned his opponent upside down. The same crouching attitude is seen on a kylix in the British Museum, E 94 (Fig. 4), but the defeated wrestler is here not so high. In these two cases, the stoop of the legs seems likely to have been exaggerated for artistic reasons to diminish the height of the group. In other examples I fancy it denotes the pankration, or practice for the pankration. Certainly this is true of the

¹⁷ *Mon. d. I.* x. 4, Amphiarau vase; Micali *Mon.* xli.; *B.M. Vases* B 48, 191, 295; coins of Aspendus. Cp. Armstrong *Wrestling*, p. 56.

¹⁸ P. 23 of this volume.

¹⁹ Dar.-Sagl. 4624 = Dennis *Cities and Cemeteries of Etruria* ii. 333.

²⁰ Dennis *op. cit.* ii. 343 = Krause xii.b, 396.

Baltimore kylix, published by Hartwig, Pl. LXIV., and probably also of the two groups of the kylix from the Bibliothèque Nationale, also published by him, Pls. XV. 2 and XVI. In the interior (Fig. 5), the victor is kneeling on

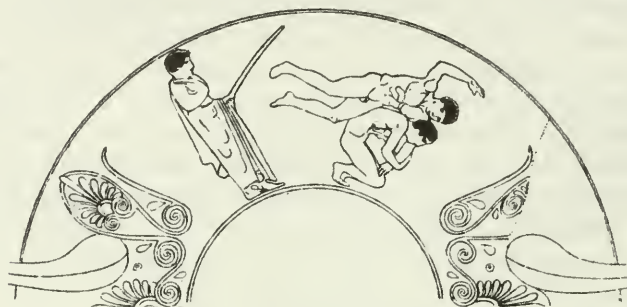


FIG. 4.—R.-F. KYLIX. B.M. E 94.

his right knee;²¹ he has let go with his right hand, and his opponent, left unsupported, is about to fall helplessly on his back. On the exterior we have the same scene slightly more advanced. The vase is unfortunately damaged; but enough is left to show us the wonderfully life-like vigour of



FIG. 5. R.-F. KYLIX. PARIS. (After Hartwig, *Meisterschal.* xv. 2.)

the drawing, and to make us regret that few vase painters attempted so difficult a subject.

It is interesting to find this same motive occurring on a British Museum

²¹ Cp. Dennis *op. cit.* 323 (=Krause xii.b, 39b), 327.

amphora B 193 (Fig. 6), representing the struggle between Heracles and the Nemean lion.²² That the types of the palaestra should be borrowed to represent his struggle with Antaeus is natural; but the persistency of the same types in his fight with the Nemean lion is so remarkable a proof of the influence of the palaestra on art, that I may be pardoned for introducing into this article frequent illustrations of this contest. The result of the throw is seen on a black-figured vase reproduced by Gerhard, *A. V.* 94, where the lion is lying on its back, and Heracles holding it down with one hand, proceeds to finish it off with his club.²³ This conclusion naturally suggests the pankration, and proves clearly that a throw which thus put the man thrown at the mercy of his opponent must have been as useful to the pankratiast as



FIG. 6.—B.-F. AMPHORA. B.M. B 193.

to the wrestler. In the present day 'the flying mare' is a favourite throw, not only in systems which require a clean throw on the back, but also in those which allow ground wrestling.

Returning to the hold which leads to this throw, we find several methods of meeting it represented. On the Amphiaraus vase²⁴ (Fig. 3) Peleus has seized with both hands the left arm of Hippalcimus and the latter in reply grips Peleus under the right arm-pit with his disengaged right hand. The result is to weaken Peleus' grip and to prevent him from turning round and hoisting Hippalcimus over his shoulder. This scene is repeated on a hydria representing the contest of Peleus and Thetis,²⁵ and on the neck of a black-

²² Mr. Norton in the *American Journal of Archaeology*, 1896, p. 10 suggests that the artist borrowed this idea from the representation of Heracles and the Erymanthian boar, on the cup of Eurystheus. It would perhaps be more correct to say that the type in both cases is suggested by the palaestra scheme.

²³ Similarly the scene on the Baltimore kylix

may be compared with a relief on a votive tablet from the Acropolis published in the *Ath. Mitth.* 1887, Pl. III. representing the lion lying huddled up on its back with Heracles bending over it. The motives are identical.

²⁴ *Mon.d.I.* x. 4. 5.

²⁵ Micali, *Mon.* xli.

figured B.M. amphora, B 295 (Fig. 7), we see a similar defence when the attack is made on the right arm.²⁶ A Berlin amphora by Andokides²⁷ (Fig. 8) shows another style of counter. The wrestler to the left grasps his opponent's left wrist, but the latter by running quickly forward has rendered



FIG. 7.—B.-F. AMPHORA. B.M. B 295. (After Musée Blacas.)

useless the right hand which should have gripped his upper arm and passing his own right hand behind his adversary's back grasps his right arm just below the elbow. On a B.M. pelike, B 191, the wrestler attacked replies by placing his disengaged hand on his opponent's neck.²⁸ In all these



FIG. 8.—R.-F. AMPHORA. BERLIN. (From *American Journal of Archaeology*.)

cases the object seems to be to prevent the opponent from turning round or to weaken his grip. The latter object is noticeable on the coins of Aspendus,²⁹

²⁶ Musée Blacas ii. = Krause xii. 34.

²⁷ *Berl. Vas.* 2159; Gerhard *Trinkschale* I. xx.; *American Journal of Archaeology*, 1896, p. 11.

²⁸ Cp. *Bull. Nap. Nouv. Sér.* V. x.; *Berl. Vas.* 3985.

²⁹ *B.M.C. Lycia* pp. 95-101, 248, exix.; cp. Head, *H.N.* p. 582, where the inscription

ΕΛΥΤΑ ΜΕΝΕΤΥΣ which occurs on one of these coins is discussed. The interpretation of these words as ἐλύψας (the wriggler), μενετός (the stayer) is attractive, but Mr. G. F. Hill to whom I am indebted for the illustrations from the coins in the B.M. tells me that the names are probably those of a magistrate or magistrates.

where the left-hand wrestler is represented grasping with both hands his opponent's left arm, while the latter with his right hand grasps his right wrist or his left upper arm. On the coin selected for illustration we may remark the manner in which the right-hand wrestler's wrist hangs helplessly down as if rendered powerless by the grip. Perhaps the Greeks like the Japanese may have studied the art of so gripping a limb as to render it useless, but such tricks belonged rather to the pankration than to true wrestling. Thus we hear of a Sicilian wrestler, Leontiscus, who overcame his



FIG. 2.—WRESTLING TYPES ON COINS IN B.M.

a, b, c. Aspendus fifth and fourth century.

d. Heraclea in Lucania fourth century.

e, f. Syracuse circa 400 B.C.

g. Alexandria, Antoninus Pius.

opponents by seizing and breaking their fingers and so forcing them to the ground.³⁰ He was not, says Pausanias, an adept at throwing his adversary and his tactics resembled those of Sostratus, the pankratiast of Sicily, who had thereby gained the sobriquet of Acrochersites. From the words of Pausanias we may conclude that such practices were exceptional and were not considered appropriate to the art of wrestling, the object of which was to throw the opponent.³¹

³⁰ Paus. vi. 4. 2 καὶ γὰρ τὸν Λεοντίσκον καταβαλεῖν οὐκ ἐπίστασθαι τοὺς παλαιόντας, νικᾶν δὲ αὐτὸν κλῶντα τοὺς δακτύλους.

³¹ Galen describes the art of wrestling as καββαλική.

C.—*Neckholds*, τραχηλισμός.

The neck is an obvious and effective place by which to seize an opponent and strength of neck is essential to a wrestler.³² Pindar in a much disputed passage of the seventh Nemean ode speaks of the wrestler's *αὐχένα καὶ σθένος ἀδιάντον* and Xenophon describing the thorough training of the Spartans says that they exercise alike legs and hands and neck.³³ In the *Equites* of Aristophanes Demos tells the sausage-seller to grease his neck that he may be able to escape from Cleon's grip.³⁴ The technical word for obtaining a neckhold was *τραχηλίζειν*,³⁵ which has also acquired the more general meanings of 'to wrestle' or 'to throw.' Neckholds must have been frequently employed in the ground wrestling of the pankration, but chiefly as a means of strangling an opponent, and the more expressive terms *ἄγχειν* and *ἀποπνίγειν* were used for this operation, while *τραχηλίζειν* was confined to upright wrestling, the object of which was to throw the opponent.³⁶ This is evident from a passage in Lucian's *Lexiphanes*, c. 5, where describing the athletes practising he says: *ὁ μὲν τις ἀκροχειρισμῶ, ὁ δὲ τραχηλισμῶ καὶ ὀρθῇ πάλῃ ἔχρητο*. Here *ἀκροχειρισμός* and *τραχηλισμός* are contrasted as typical respectively of the pankratiast and the wrestler. Further a story told by Plutarch proves that the object of *τραχηλισμός* was to throw the opponent: *ἐν χειραψίᾳ περικρούοντος τοῦ προστραχηλίζοντος καὶ κατασπῶντος ἐπὶ τὴν γῆν ἐπειδὴ τῷ σώματι ἐλείπετο ὁ προσπεσὼν ἔδακε τὸν βραχίονα καὶ ὁ ἕτερος εἶπε, Δάκνεις, ὦ Λάκων, ὥσπερ αἱ γυναῖκες· οὐ μὲν οὖν, εἶπεν ἄτερος, ἀλλ' ὥσπερ οἱ λέοντες*.³⁷

This story is well illustrated and may even have been suggested by the representations in art of Heracles wrestling with the Nemean lion. On many black-figured vases³⁸ we see the lion standing upright on its hind legs and wrestling with Heracles, who with his left hand grasps the animal round the neck and seizes its lower jaw, and with his right seizes its upper jaw. The lion has tried to break Heracles' grip round its neck by using its teeth, and the hero by seizing and forcing open its jaws prevents it from biting. In this and other varieties of the standing type Heracles is usually described as strangling the lion. The description appears to me hardly accurate. With the possible exception of the type where Heracles has the lion's head in chancery, he is not in a position in which he can strangle the animal, but is

³² Philostrat. *Gym.* 35.

³³ *Lac. Rep.* v. 9.

³⁴ l. 491 *διαβολή* and *διαβάλλειν* in this passage and in lines 262, 496 must clearly denote some sort of neckhold.

³⁵ Cleostratus of Rhodes according to Africanus won his victories in this way: *τραχηλίζων ἀπελάμβανε*. For a more general use of the word, cp. Plato *Amat.* 132c, d, Plut. *Anton.* 33.

³⁶ Cp. Philo *περὶ ἀνείρων* 163, *παλαισμοσι πολυτρόποις καὶ πολυμηχάνοις αὐχενίζοντες ἐκ-*

τραχηλίζειν καὶ καταβῆττειν πρὸς τὸ ἔδαφος.

³⁷ *Apophthegm. Lac.* 234 D, 44. In his life of Alcibiades c. 2 he tells the same story of him. *ἐν γὰρ τῷ παλαίῳ πιεζοῦμενος ὑπὲρ τοῦ μὴ πεσεῖν ἀναγαγὼν πρὸς τὸ στόμα τὰ ἄμματα τοῦ πιεζούντος οἷός τε ἦν διαφαγεῖν τὰς χεῖρας*. Biting was forbidden both in wrestling and in the pankration, but was allowed by the Spartans in the latter.

³⁸ E.g. *B.M. Vases* B 232, 233, 621; Gerh. *A.V.* 74, 93, 256.



a



b



a

(From a photograph by MANSSELL & Co.)

BRONZE GROUPS IN THE BRITISH MUSEUM.

merely wrestling with it and trying to throw it to the ground, the attitudes and grips being borrowed directly from the wrestling ring.³⁹ Having thrown the lion he can either strangle it or use his sword or club. That his object is to throw the lion is clear from a B.M. oinochoe, B 621,⁴⁰ (Fig. 10). Here we see Heracles with his left arm round the lion's neck and his right hand seizing its jaw, at the same time turning round and twisting the lion off its feet. If in imagination we continue the action, Heracles and the lion will fall together in the position represented on a relief from Lamptrae published in the *Ath. Mitth.* 1887, Pl. III. which shows Heracles strangling the lion on the ground.

The monuments exhibit several varieties of neckhold. Sometimes a



FIG. 10.—B.-F. OINOCHOE. B.M. B 621.

wrestler seizes his opponent's wrist with one hand, and his neck with the other. The best example of this occurs on a red-figured krater in the Ashmolean (Fig. 11). The wrestler so attacked defends himself by seizing the other under the left arm-pit with his left hand. An interesting feature of this vase is the figure of winged Victory seated upon a pillar watching the contest. The same method of attack and defence occurs on an Etruscan mirror representing the contest of Peleus and Atalanta.⁴¹ A different method of defence is seen on the B.M. amphora, B 295 (Fig. 12) the wrestler on the left with his left hand grasping his opponent's right arm, the arm which is seizing

³⁹ Emil Reisch well describes such a type as 'ein Ringkampfmotiv der Palästra eingeführt,' or as a 'Kunstgriff der ἀρθη πάλη,' *Ath. Mitth.* xii. 1887, p. 119 sq.

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⁴⁰ The vase is unsigned, but Mr. H. B. Walters tells me that it is undoubtedly the work of Nicosthenes.

⁴¹ Gerh. *Etrusk. Spiegel* 224, Dar.-Sagl. 592.

his neck. We may notice that he grasps it at one of the weakest points, just below the elbow. A third means of defence is to seize the opponent's neck.⁴² M. de Ridder would add yet another, viz., grasping the opponent's thigh, but there is little evidence for such a view. On the B.M. kylix E 94 which he quotes, as on other vases showing the beginnings of a wrestling match, the wrestlers hold their hands to the front and slightly below the waist; but so do wrestlers of the present day in the Graeco-Roman style where no hold is allowed below the waist.

This type seems to be particularly connected with the match between Peleus and Atalanta, which we must remember was a genuine wrestling match, and took place at the funeral games of Pelias. A most interesting



FIG. 11.—R.-F. KRATER. OXFORD. (From *Catalogue of Ashmolean Museum*, Pl. XIV.)

representation of it is on a B.-F. amphora at Munich (Fig. 13).⁴³ Peleus has apparently tried to seize Atalanta's right arm with both hands but the latter moving forward seizes him by the back of the neck very much in the style of a modern wrestler. To the left stands the familiar umpire with his forked rod.

The same motive is frequently employed in the case of the Nemean lion, Heracles having his left arm round the animal's neck and with his right hand grasping its left paw (Fig. 14).⁴⁴ Two other varieties of neckhold are also furnished by this context. A St. Petersburg bronze⁴⁵ represents an infant

⁴² Krause xii. 43.

⁴³ Jahn 584. Gerh. *A. I.* 177.

⁴⁴ E.g. *B.M. Vases* B 234; Gerh. *A. I.* 192.

⁴⁵ *Mon. d. I.* vi. vii. 69, 2a.

Heracles and the lion firmly clasping one another like two Cumberland wrestlers and a kylix of Ergotimus in Berlin ⁴⁶ shows us Heracles with both hands



FIG. 12.—B.-F. AMPHORA. B.M. B 295. (After Musée Blacas.)

clasped round the lion's neck. On a Munich amphora (Fig. 15) ⁴⁷ the hero employs the latter grip against Antaeus, who sinking on one knee grabs

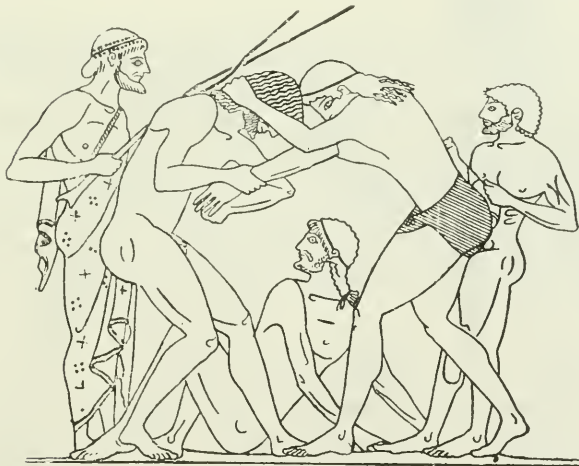


FIG. 13.—PELEUS AND ATALANTA. B.-F. AMPHORA. MUNICH. (After Gerhard *A.V.*)

vainly at his conqueror's foot. The interlocking of the hands is noticeable as being the same as that commonly employed by our Westmorland and

⁴⁶ Gerh. *A.V.* 238, cp. *B.M. Vases* B 232, 233, 621. ⁴⁷ Jahn 3; Gerh. *A.V.* 114.

Cumberland wrestlers; the hands are turned so that the palms face one another and the fingers are hooked together. The vase further illustrates



FIG. 14.—B.-F. AMPHORA. B.M. B 234.

the tendency which I have already remarked in art to represent Heracles and Theseus employing the holds of the wrestler rather than of the



FIG. 15.—B.-F. AMPHORA. MUNICH. (After Gerhard, *A. V.*)

pankratiast. Here again if we suppose Heracles to complete the throw, both will fall together in the position shown on various vases which represent

the struggle on the ground.⁴⁸ A curious variety of neckhold occurs on a psykter of Euthymides depicting Theseus and Cercyon.⁴⁹ Theseus having somehow clasped his arms over Cercyon's left shoulder and under his right arm-pit has him completely at his mercy and swings him off his feet. How he obtained such a hold is not clear; we can only suppose that Cercyon after his usual style rushed at Theseus with his head down as he does on the Euphronios kylix⁵⁰ where Theseus has doubled his head up under his arm. But these two vases are exceptions to the usual treatment of the scene which will be discussed later.

Perhaps we should mention here another lion type where Heracles grips the lion with his right arm over and his left under its neck. At first sight it appears that Heracles is really strangling the brute, but a comparison of the varieties of the type convinces me that we have here merely a variation of a familiar bodyhold which will be discussed below and that Heracles is really lifting the animal off its feet in order to swing it to the ground. Indeed a b.-f. amphora in Vienna⁵¹ actually represents him in the act of swinging the lion. Such a lift, which would be impossible in the case of a human adversary, is rendered practicable only by the size and weight of the lion's neck and head, and I therefore class it with the bodyholds to be described in the next section. The type is distinguished by the fact that the lion's back is always more or less rounded, and the group is therefore particularly suitable for the circular spaces of coins. On a coin of Heraclea in Lucania (Fig. 9) we see Heracles on the point of swinging the lion, in the B.M. bronze 672 (Pl. XI. *a*), he has obtained the grip but is still stooping slightly. To obtain the grip it is necessary of course to stoop and this position is clearly shown on the B.M. kylix E 104 (Fig. 16) and still more so on the beautiful little gold coins of Syracuse (Fig. 9*e, f*), where Heracles is represented sometimes on one knee sometimes on both as he lifts the animal off its feet. A small bronze ornament from the Farges collection, published by Reinach,⁵² shows Heracles standing sideways to the lion preparing with this same grip to heave him over. In some later monuments he certainly does appear to be strangling the lion,⁵³ but a consideration of the whole series seems to prove that the original motive is that of lifting and swinging the lion and is borrowed directly from wrestling and that the strangling is a later addition borrowed from a totally distinct type.

Of the throws to which the grips described above lead we have but little evidence. Doubtless tripping with the legs was freely employed with these holds but the only possible illustration of such a practice is the group of bronzes to be described below where the hold is obtained from behind.⁵⁴ There can be no doubt also that the movement already noticed as *ἔδραυ*

⁴⁸ R.-f. krater of Euphronios, Klein *Euphronios* p. 118 A, r.-f. kylix *J.H.S.* x. Pl I.

⁴⁹ *Ann. d. I.* 1870, O, Klein *op. cit.* p. 205; Schreiber *Atlas* xxiv. 10.

⁵⁰ Klein *op. cit.* p. 194.

⁵¹ Laborde i. 93.

⁵² *Répertoire de la Statuaire* 249; *Coll. Farges* 170. *a*.

⁵³ E.g. a relief in Campana, *Antiche Opere in Plastica* xxii.

⁵⁴ Pp. 290, 291, Figs. 25, 26.

στρέφειν, or turning the back to the opponent, was also employed so as to twist his neck and so twist him off his feet.⁵⁵ This movement we have seen depicted in the lion group (Fig. 10); it is more fully shown on a Panathenaic vase published in *Mon. d. I.* i. 22, the whereabouts of which I have



FIG. 16.—R.-F. KYLIX. B.M. E 104. (From Murray's *Designs from Greek Vases in B.M.*)

unfortunately failed to discover. The drawing is far from satisfactory but it seems to represent a sort of cross-buttock with a neckhold.

The British Museum has an Etruscan bronze representing Peleus wrestling with Atalanta, each holding the other's neck.⁵⁶ The figures are both arranged sideways so as to face the spectator. The type is not uncommon on the lids of Etruscan lebetes, but the wrestling scheme is so symmetrical, and so manifestly adapted to the practical requirements of a handle that it is useless for our present purpose.

D.—Bodyholds.

As in the case of neckholds, so here we find the preliminary stage represented where the wrestlers have one hand round each other's backs, and are trying with the other to complete their hold. Sometimes as on a red-figured kylix⁵⁷ published by Noel des Vergers their other hands are dis-

⁵⁵ Philostratus *Gym.* 35 speaks of the wrestler's neck *καμπτόμενον καὶ στρεβλούμενον ὑπὸ τῆς πάλης*.

⁵⁶ *B.M. Bronzes* 748; *ep. ib.* 639, 744, 746; *Babelon Bronzes du Cabinet des Médailles* 935;

Catalogue Forman Collection 141, an interesting variety, the two wrestlers with crossed arms grasping each other by the forearm.

⁵⁷ *L'Étrurie* xxxvii.

engaged, sometimes as on the B.M. Panathenaic vase B 603 (Fig. 1) one wrestler grasps the other's wrist. In both cases the wrestlers stand square to one another in the position of *σύστασις* which is excellently described by Ovid in his account of the struggle between Hercules and Achelous.

Inque statu stetimus, certi non cedere: eratque
Cum pede pes junctus, totoque ego pectore pronus
Et digitos digitis, et frontem fronte premebam.—*Met.* ix. 43.

The sideways position or *παράθεσις* with a bodyhold is seen on the Theseus kylix in the British Museum E 84 (Fig. 2). Cercyon rushes forward as if by sheer bulk to bear down Theseus, but the latter, moving to the right to avoid the onset, slips his left arm round Cercyon's body just under the right arm-pit. The hold is not completed, but Cercyon 'mole ruit sua,' and Theseus will surely hasten his fall by some click with the left leg, perhaps by hooking his left leg round Cercyon's right and with a turn to the left throwing him backwards, or else by throwing him across his thigh. A very similar group representing Heracles wrestling with Antaeus occurs on the frieze of the theatre at Delphi.⁵⁸ We may further compare the quaintly drawn scene on the neck of a Nicosthenes amphora at Vienna.⁵⁹ There are two wrestling



FIG. 17.—R.-F. KYLIX. B.M. E 95.

groups on this vase. In the first one of the wrestlers is stooping down as if to seize his opponent round the waist, but the other frustrates his attempt by seizing his left wrist and forcing his neck down. In the second group one wrestler has secured a firm hold round the other's body, and lifting him to the left prepares to swing him to the ground.

Another B.M. kylix E 95 (Fig. 17) shows a most interesting grip. The wrestler to the left has grasped his opponent with his right hand under the right arm-pit, and turning him sideways has somehow succeeded in passing his left arm round his back, thus rendering useless his opponent's right arm, which hangs idly in front of his body. He seems to have obtained this grip by seizing his opponent's right arm with both hands, the wrist with his left, the upper arm with his right. By sharply pulling the arm towards him he must have turned him sideways and then releasing the grip of his left hand he was enabled to take the fresh hold round his back. The next stage according to the description in the catalogue will be that represented in.

⁵⁸ Homolle *Fouilles de Delphes* iv. 76.

⁵⁹ Vienna 232 *Vorlegeblätter*, 1890-1, iv. 3.

E 94 *b* (Fig. 4). This can hardly be correct: this throw, which we have described above, follows directly from the armhold with both hands and so does the position we are discussing, but it is a totally distinct development of the original hold, not an intermediate position, and the throw must have been completed by some form of tripping. Unfortunately the lower part of the figures is wanting and it is idle to attempt a more definite explanation.

A very effective bodyhold is obtained by seizing the opponent round the waist with both hands: he can then be lifted off his feet and swung to the ground. The hold may be obtained from the front, from behind, or from the side, and all three varieties occur constantly on the monuments. There are various technical terms for such holds, *περιτιθέναι*, *διαλαμβάνειν*, *μεσοφέρδεν*, *μεσοφέρδην*, and the effectiveness of the grip is proved by the proverbial use of the expression *μέσον ἔχειν*.⁶⁰ *μεσοφέρδεν*⁶¹ and its cognate forms are known only from lexicographers and are explained by Hesychius as *μεσολαβεῖν*. *περιτιθέναι* and *διαλαμβάνειν*⁶² both occur in the Oxyrhynchus papyrus and the context enables us to distinguish them. Both passages have been noticed above.⁶³ In the opening lines a wrestler is instructed to take a sideways position to the left and with his right arm seize his opponent by the head. The latter receives the order *σὺ περίθες*. He is to grip his adversary by the body, passing his right arm across his back and his left arm under his stomach. These movements are clearly represented on the Theseus and Cercyon vases, save that Cercyon has lost his neckhold and his hand has slipped down on to the shoulders of Theseus (Figs. 21, 22). They are shown still more clearly because at an earlier stage on a black-figured amphora from Berlin, for a drawing of which I am indebted to Dr. Zahn.⁶⁴ *περιτιθέναι* will mean then to encircle an opponent's waist by passing one arm across his back and the other under his stomach. *διαλαμβάνειν* as is clear from the passage in the papyrus must mean to seize a person by the waist by placing one arm round each side so as to clasp hands behind his back, or, if the hold is taken from behind, before his stomach. This explanation agrees with the first of the two meanings given in Bekker's *Anecdota*, 36. 3 *διαλαβεῖν δύο σημαίνει τὸ ἐκατέρωθεν τινοσ λαβέσθαι καὶ τὸ εἰς δύο ἢ πλέονα διαχωρίσαι ἢ διελεῖν*. Similarly in Aristophanes *Eccles.* 1090 the scholiast explains *διαλελημμένον* as *μέσον εἰλημμένον*.

The bodyhold from the front is difficult to obtain, but extremely effective. It was the hold by which Hackenschmidt, the winter before last, won his sensational victory over Madrali. Cercyon is sometimes represented attempting to obtain this hold in a clumsy barbarous fashion. Putting his head down he rushes blindly at Theseus with the result that the latter obtains a *πάλαισμα ἄφυκτον*. The Euphronius kylix and the Euthymides psykter have been mentioned above.⁶⁵ The same result is depicted on the

⁶⁰ Aristoph. *Eg.* 387, *Acharn.* 571.

⁶¹ Hesychius, Photius.

⁶² Cp. Plut. *Anton.* 33.

⁶³ P. 265.

⁶⁴ *Berl. Vas.* 1716. The *παράθεις* is most marked in this group. A second group on the same vase is of the ordinary armhold type.

⁶⁵ P. 277.

Chachrylion kylix at Florence (Fig. 18)⁶⁶ where Theseus instead of obtaining a neckhold has forced Cereyon's head down and with both arms clasped under his stomach can easily heave him over. With this hold we may compare the hold of Heracles round the lion's neck, as shown on a coin of Heraclea (Fig. 9*d*), or better still, on the B.M. kylix E 104 (Fig. 16). Another danger of attempting such a hold clumsily is illustrated by the two groups given in Pl. XII., *a*, *b*, from a b.-f. amphora at Munich,⁶⁷ the drawings of which have been kindly supplied to me by Professor Furtwängler. In both cases we see a bearded athlete rushing blindly on to seize the other by the waist. The upper group is merely preliminary: in the lower group his opponent, prevented from obtaining the hold for the heave by the grip on his right wrist, seems to be leaning all his weight upon him with the object of forcing



FIG. 18.—THESEUS AND CERCYON. R.-F. KYLIX. FLORENCE.
(After Harrison and MacColl, Pl. X.)

him to the ground. This fate actually befalls Antaeus as he catches at the leg of [Heracles, and a black-figured vase shows him fallen, with Heracles pressing him down upon the ground with one hand and striking at him with the other.⁶⁸ Antaeus and Cereyon both pay the penalty for their clumsiness. On the Berlin amphora reproduced above (Fig. 8) we see the same hold successfully secured. A young wrestler has seized by the waist and lifted off his feet a bearded athlete who vainly endeavours to break his hold.

More frequently we see the hold obtained from behind. For the

⁶⁶ Harrison and MacColl, *Greek Vase Painting*, Pl. X. Klein p. 134*d*. To these may perhaps be added a fragment of a vase in the Louvre very similar in style to the Enphronius vase which Wernicke considers to represent Theseus and Apollo. The former has his right arm round

his opponent's neck while Apollo with his left strives to break the grip. *Jahrb.* 1892, p. 209.

⁶⁷ Jahn 1336.

⁶⁸ Naples 2519, Millingen, Pl. XXXI, Klein *loc. cit.*

illustration in Pl. XII. c. from a b.-f. amphora in Munich,⁶⁹ I am again indebted to the kindness of Professor Furtwängler. The stiffness and lifelessness of the group is characteristic of this type on the vases, a characteristic which is the more remarkable by contrast with the vigorous representation of the same type on coins and gems. We may notice however that the wrestler lifted off the ground has in defence hooked his right foot round his opponent's leg. Similar scenes occur on a small amphora at Naples,⁷⁰ and on a black-figured Berlin amphora reproduced very inadequately by Krause,⁷¹ a drawing of which I have received from Dr. Zahn. It represents a fat-bellied bearded wrestler lifting a youth who in an ineffectual manner strives to loosen his grip. In this and in the Munich vase the hands are locked in the manner already noticed.

This lifting type is particularly associated with the struggle between Heracles and Antaeus, though, as Prof. Furtwängler⁷² has shown, in this connexion it does not occur in archaic art, nor as far as I know does it occur on the red-figured vases. It must however have been contemporary with the latter, as we find the scene represented on the coins of Tarentum as early as the fourth century. From this time onwards the lifting of Antaeus occurs repeatedly in bronzes and statues, and especially on coins and gems. Yet even here we find little evidence for the later version of the story recorded by the scholiast to Plato,⁷³ and by Roman poets,⁷⁴ that Antaeus being the son of earth derived fresh strength from his mother every time he touched the earth, and that Heracles therefore lifted him from earth and squeezed him to death. There are a few late monuments which may have been influenced by this form of the story, and Philostratus⁷⁵ gives a detailed description of the scene; but these are the exceptions and there can be no doubt that in the majority of cases, as Prof. Furtwängler says, Heracles lifts Antaeus not to crush him, but to throw him. Usually Heracles lifts Antaeus to his right, and the whole attitude denotes that he intends to hurl him with all his force to his left. Even in the late realistic monuments where Antaeus is represented with an expression of intense agony, the attitude of Heracles is preserved, and though the agony might denote the squeezing to death the attitude of Heracles is neither necessary nor appropriate to such a process. Indeed I have a cutting from a daily paper representing Madrali in the grip of Hackenschmidt which for expression of pain far surpasses any representation of Antaeus. It seems likely therefore that the story of Heracles lifting Antaeus from the ground and squeezing him to death, of which there is no evidence in early literature or art, was a late invention suggested by the regular artistic type. This view is confirmed by the persistence of this artistic type on coins; for nowhere is the action of throwing more clearly

⁶⁹ Zahn 495.

⁷⁰ *Bull. Nap. Nouv. Sér.* v. 10.

⁷¹ xiiib, 40b, *Berl. Vas.* 1853.

⁷² Roscher s.v. Herakles.

⁷³ *Leg.* 796 A.

⁷⁴ Lucan *Pharsalia* iv. 612 sq.

⁷⁵ *Im.* ii. 21, yet even here the wrestling tradition survives in the concluding words where Philostratus describes Hermes coming to crown Heracles *ὅτι αὐτῷ καλῶς ὑποκρίνεται τὴν πάλην.*

denoted than on some of the late coins of the Empire, an example of which is given in Fig. 9.⁷⁶ We are justified therefore in connecting all monuments of this type directly with the wrestling-school. In examining other types of the Antaeus story we shall find that they are all borrowed from the palaestra, in archaic art sometimes from the pankration, in later art generally from true wrestling.

The bodyhold from the side is also well illustrated by the Antaeus and Cereyon groups. In the first place we see Antaeus seizing, or trying to seize, Heracles by the foot. Such a movement is excessively dangerous and requires the greatest agility for success, and Heracles takes advantage of the opening as has been pointed out either to force his adversary to the ground, or more frequently to seize him by the waist as he stoops down, in the same manner as Theseus seizes Cereyon. We may distinguish two varieties of this type. In the first Heracles passes both arms round Antaeus, clasping his hands under his stomach⁷⁷ (Fig. 19); in the second he has passed one arm

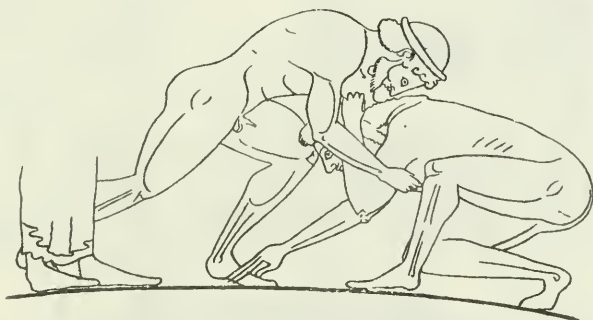


FIG. 19.—HERACLES AND ANTAEUS. B.-F. AMPHORA. B.M. B 222.

round him and with the other grasps the hand with which Antaeus strives to defend himself⁷⁸ (Fig. 20). In both cases the object seems to be the same, to lift Antaeus off the ground and throw him heavily. Mr. Cecil Smith in volume xxii. of this journal⁷⁹ appears to me to have misinterpreted this type. 'The hero,' he says, 'locks his arms around the neck or chest of his adversary, and with head also pressing against the other's shoulders squeezes him to death: it is this type (adaptable also for the contest with the Nemean lion) which distinguishes the Antaeus contest from all others.' 'The same type,' he adds, 'came to be used for the contest of Theseus with Cereyon.' Against this view I submit that there is no literary evidence for the 'squeezing' process until a much later date, and further that the position is not a natural or effective one for the purpose. Plato, as has been shown, quotes Antaeus and Cereyon as types of the pankratiast.⁸⁰ The scholiast to

⁷⁶ *B.M.C.* Coins of Tarentum 376, Alexandria Troas 1054, 1479, Nicaea 113, Tarsus 184; Furtwängler *Ant. Gem.* xxvii. 15, xliii. 67, 68; Reinach *Répertoire de la Statuaire* i. 472. 6, 477. 6, ii. 233. 6, 539. 3, iii. 155. 6.

⁷⁷ *B.M. Vases* B 222, 596; Gerh. *A.V.* 113.

⁷⁸ Gerh. *A.V.* 70; Jahn 1107.

⁷⁹ P. 43.

⁸⁰ *Leg.* 796 A, cp. *supra* p. 27.

Plato, who tells us that Heracles ἀράμενος τὸν Ἀνταῖον μετέωρον ἄμμασι κλάσας ἀπέκτεινε says of Cercyon that Theseus αὐτὸν ἀράμενος ἔρριψεν εἰς γῆν καὶ ἀπέκτεινεν. Now if we find the same type used in art for the two contests it is reasonable to infer that the same motive explains them both. Therefore either Heracles and Theseus are both represented as squeezing their opponents to death, or they both throw them to the ground and so slay them. But no one has suggested that Theseus squeezed Cercyon to death: the evidence of the monuments and of literature is conclusive against such an idea. Unless therefore we are prepared to say that in precisely similar attitudes Heracles squeezes Antaeus to death, and Theseus lifts Cercyon in order to throw him, we must conclude that they are both lifting their opponents, and the same conclusion holds good of the representations of Heracles and the Nemean lion described in the last section. More



FIG. 20. B.-F. AMPHORA? MUNICH. (After Gerhard *A. V.* 70.)

commonly however in the latter contest Heracles stoops down or kneels, forcing the lion's head to the ground and strangling it with his left arm or both firmly clasped round its neck. We return therefore to Prof. Furtwängler's conclusion that Heracles lifts Antaeus, not in order to crush him, but to throw him, and the same type taken directly from the wrestling-school is used with Antaeus, the Nemean lion, and Cercyon. Similarly we shall find that the types for Heracles' contest with Achelous and the sea monster are derived from the pankration. We may say indeed that for every contest in which weapons were not used the Greek artist found his natural, or indeed his only models in the palaestra.

In the case of Cercyon there is fortunately no possible doubt as to the object of the grip which we are discussing. On the British Museum kylikes E 36, 48 (Figs. 21, 22) and on a Bologna kylix ⁸¹ we see Theseus actually

⁸¹ *Mus. Ital.* iii. 260; Klein *l.c.* e.g. h.

lifting Cercyon off his feet. On E 48 the latter endeavours to save himself by seizing Theseus round the waist, on the other two vases he clasps him round the back with the left arm, while with his right hand he either



FIG. 21.—THESEUS AND CERCYON. R.-F. KYLIX. B.M. E 48.

reaches for the ground or grabs at the foot of Theseus. Had we no other evidence we should have no doubt that the movement here depicted is identical with 'the heave' of modern wrestling, so popular in the West of England. Apparently 'the heave' was no less popular with the Athenians



FIG. 22.—THESEUS AND CERCYON. R.-F. KYLIX. B.M. E 36.

and is therefore closely associated by the vase painters with the contests of Theseus who was the first, they claimed, to make wrestling an art. Fortunately we have a far more important monument to confirm our view. A metope

from the Theseum shows us the very moment when Theseus having lifted Cercyon off his feet is turning him over, or giving him 'the heave' (Fig. 23). Here too as on the vases, Cercyon endeavours to save himself, his right arm clasped round Theseus, his left vainly catching at the ground or at Theseus' leg. A yet later movement is given by a well known bronze statuette in the Louvre,⁸² the victor having turned his opponent completely over, and on a late relief from the same museum representing the genii of sport⁸³ the defeated

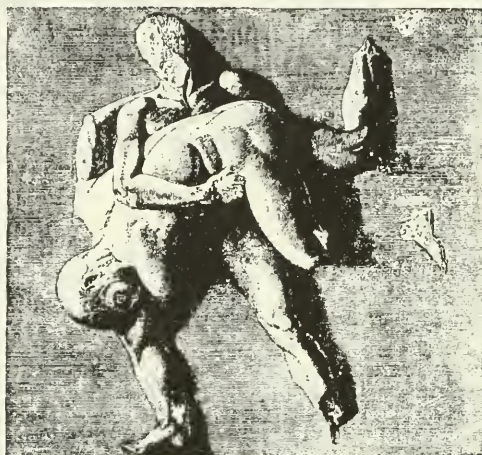


FIG. 23.—METOPE OF THESEUM. (From Prof. E. Gardner's *Greek Sculpture*.)

genius is seen slipping through the other's arms headforemost on to the ground.

The motive of the Cercyon vases is reproduced as a purely palaestra scene on a red-figured kylix belonging to Mrs. Hall exhibited at the Burlington Fine Arts Club in 1903.⁸⁴ Between a pillar and an official we see two wrestlers, the left hand one grasping the other round the back, pressing his head down and preparing to heave him. To this we may add the group on the Berlin amphora 1716 already referred to. Finally we find the heave and the hold necessary for it clearly described by Quintus Smyrnaeus and Nonnus, of whose descriptions I have given a brief abstract on p. 25 of this volume.

E.—*The Cross-buttock.*

The different holds which we have been discussing must certainly have been combined with various movements of the body or the legs. Some of these have been already mentioned incidentally, but it may be useful briefly to sum up the evidence on these points. We have seen that certain holds

⁸² Clarac 802, 2014; Schreiber *Atlas* xxiv. iv.

⁸³ Clarac 187, 455.

⁸⁴ *Catalogue* iii. 64.

could be taken from the front, from the side, or from behind. In the latter case a wrestler must either force his opponent to shift his position or shift his own position. The Greek term for twisting an opponent round so as to turn his back or his side was *μεταβιβάζειν*. Plato, in the *Laws* 795 c, speaking of the necessity of developing both sides of the body equally, illustrates his point from the trained boxer or pankratiast who οὐκ ἀπὸ μὲν ἀριστερῶν ἀδύνατός ἐστι μάχεσθαι χωλαίνει δὲ καὶ ἐφέλκεται πλημμελῶν ὁπότεν αὐτὸν μεταβιβάζων ἐπὶ θάτερα ἀναγκάζη διαπονεῖν. The monuments have been already illustrated (Fig. 17, and Pl. XII. c). So in the fight between Heracles and Achelous, Ovid describes the former as breaking away from the other's grip

Impulsumque manu

Protinus avertit, tergoque onerosus inhaesit.—*Met.* ix. 53.

Again, a wrestler may attain the same result by springing round himself—*μεταβαίνειν*. Thus in the Oxyrhynchus Papyrus we read:—

σὺ αὐτὸν μεταβὰς πλέξον,

and the corresponding order to the other pupil is *μεταβαλοῦ*—‘turn round.’ The use of the preposition *μετά*, recalls the ‘afterplay’ of Cornish wrestling. A more technical word for the same movement is *ἔδραν στρέφειν*, which is used much in the same way as our ‘buttock’ and ‘cross-buttock.’ This, according to Theocritus, xxiv. 111, was a favourite throw of the Argive wrestlers,

ὅσσα δ' ἀπὸ σκελέων ἔδρῳστροφοὶ Ἀργόθεν ἄνδρες
ἀλλήλους σφάλλουσι παλαίσμασιν.

Theophrastes, *Char.* 27, describing the person who wishes to be thought a well educated and accomplished gentleman, tells us that he affected *παλαίων ἐν τῷ βαλανείῳ πυκνὰ τὴν ἔδραν στρέφειν*. There has been some doubt whether *ἔδραν στρέφειν* means to turn oneself round, or one's opponent; but Theophrastus leaves no excuse for any doubt. We can picture this athletic fraud strutting about the bath and cross-buttocking imaginary opponents, just as his modern counterpart delights to bowl imaginary balls, or with his walking stick wings imaginary birds. Whether the Argive throw was the buttock or the cross-buttock, we cannot say: the addition of the words *ἀπὸ σκελέων* suggests the latter throw, in which the legs are brought more into play.

These movements may be illustrated by a black-figured vase in the Museo Gregoriano,⁸⁵ with a frieze of athletic scenes (Fig. 24). The accompanying illustration is from a photograph obtained for me by Mr. T. Ashby, of the British School of Rome, with the consent of Dr. Bartolommeo Nogara, Director of the Museum. The wrestler to the left has obtained a hold round the other's waist, either from behind or in front, but the latter by leaning his weight forward and seizing his arms has frustrated his attempts

⁸⁵ xvii. 1a.

at lifting him, and is himself in the position of advantage. Somewhat similar appears to have been the motive of a wrestling group on a metope of the treasury of the Athenians at Delphi,⁸⁶ representing the exploits of Theseus, except that both the figures are here more upright. The left hand figure has seized the other by the waist; his opponent, as far as we can judge from the fragment, leans forward seizing him by the neck with his left arm.

A still better example of a cross-buttock is afforded by an unpublished bronze acquired by the British Museum in 1900 (Pl. XI. *b.*).⁸⁷ It represents a



FIG. 24.—B.-F. AMPHORA IN THE MUSEO GREGORIANO.

contest between a thick-set bearded man and a powerfully made youth, and though of crude and coarse workmanship, is so full of vigour and life, that it is probably a copy of some good original. The bearded man has his back turned to his opponent, and is twisting him off his feet by means of a most curious arm-lock. With his right hand he holds his opponent's right arm, forcing it back across his own right thigh, while he has slipped his left arm under the other's left arm-pit, and gripped his neck, thus rendering the imprisoned arm absolutely useless, and obtaining a powerful leverage similar

⁸⁶ *Fouilles de Delphes* iv. 46, 47.

⁸⁷ On case C in the bronze-room. Height 5½ in. provenance unknown, date uncertain,

but Mr. Walters informs me it is certainly not earlier than the first century A.D.



a



b



c

to that of our half-Nelson, by means of which he twists him to the right, and forces him to the ground. The position may have been reached in the following way: the victor seizes his opponent's right arm and by a quick jerk turns him to the right (*μεταβιβάζει*), at the same time moving himself to the left, so as to be behind him. He then immediately slips his left hand under his left arm-pit, so as to seize his neck and force it down. By a curious coincidence, another copy of this most interesting group has been published this year in the sale catalogue of the Philip collection in Paris.⁸⁸ The Paris group is of finer workmanship, described in the catalogue as 'bon style Gréco-Romain,' and is in much better preservation, but the motive is identical, and there can be no doubt that they are copies of the same original. They have also some points of resemblance with a bronze published in the sale catalogue of the Forman collection.⁸⁹ Here too we have two athletes of a powerful type, one bearded, the other beardless, and the arm-lock is very similar, as far as I can judge from the illustration; but the position of the body is rather that represented in Fig. 25, except that in the Forman group the beardless wrestler has not yet fallen on his knee. Perhaps the Forman bronze represents a later moment than the British Museum group, the moment when the cross-buttock has been completed, and the defeated wrestler is in the act of falling. Or else we must suppose that the artist has attempted to combine two well known originals, for I cannot believe that the bronzes represented in Pl. XI. b, Figs. 25, 26 are all derived from but one original. The powerful build, crisp hair, and short beard of the standing athlete in these groups are characteristic of the Farnese Heracles, and the two wrestlers are therefore identified with Heracles and Antaeus.⁹⁰ If the identification is correct, it is an additional proof of my contention that the contest between Heracles and Antaeus is a genuine wrestling match, in which, as long as they are on their feet, 'squeezing' or 'strangling' finds no part.

F.—*Tripping*.

We have already seen that the general term for tripping is *ὑποσκελίζειν*, that *ἐμβολή* and *παρεμβολή* denote special forms of tripping, *ἐμβολή* the hank, *παρεμβολή* the back-heel. By analogy *διαβολή* if used of a leg movement might mean 'the outside stroke.' Finally Eustathius uses the terms *μεταπλασμός* and *παρακαταγωγή* to describe the chip by which Odysseus threw Ajax, apparently 'the inside click' or 'hank.'⁹¹ The monuments afford us very little direct illustration of these tricks. M. de Ridder quotes a bronze mirror on which are engraved two Cupids wrestling.⁹² One of them has seized the other from behind and is lifting him off his feet, but the latter by hooking his left foot round his opponent's left leg prevents him from swinging him. A similar trick seems to be suggested in the vases shown in Fig. 8, and

⁸⁸ *Collection P. Philip* Paris, 1905, No. 484.

⁸⁹ London, 1899, No. 95.

⁹⁰ We may add to them the much mutilated

group in the Louvre, No. 361.

⁹¹ P. 25 of this volume.

⁹² Stephani, *C.R.* 1869, Pl. I. 29, p. 144.

Pl. XII. *c.* The poverty of this evidence is remarkable when we contrast the endless varieties of tripping depicted in Egyptian art.⁹³ In depicting the complicated scenes of such sports as wrestling and boxing, the Greek vase painter seldom departed from a few conventional types. More conclusive is the indirect evidence of a group of bronzes, representing a wrestler fallen on the ground supporting himself on his left arm, while over him stands his victor with his left foot still twisted round his, and his right foot behind only just touching the ground. So far all the bronzes agree, but in the treatment of



FIG. 25.—BRONZE. ST. PETERSBURG. (After Stephani, *C.R.*)

the arms there are two varieties. In the St. Petersburg bronze⁹⁴ (Fig. 25) the victor forces the other's head down with his left and with his right presses the other's right arm back in the same way as in the B.M. bronze described above (Pl. XI. *b.*). In the Constantinople group⁹⁵ (Fig. 26) he holds his opponent's neck with his right hand, while with his left he has twisted backwards his right arm and shoulder. In both cases he appears to have made his attack from behind—the *after play*. In the first case he

⁹³ There are 340 wrestling groups in the tombs of Beni Hassan (*Archæolog. Survey of Egypt, Beni Hassan* ii. Pls. V. XV.). Separated as they are by nearly 2000 years from the monuments which we are considering, it is obvious that they have no connexion with Greek wrestling in historical times, though they are often used in text-books to illustrate it. Should Cretan exploration bring to light a series of Minoan wrestling groups, the comparison would be of very different value.

⁹⁴ Stephani, *C.R.* 1867, i. 1. 5.

⁹⁵ *Jahrb.* 1898, Pl. XI. Other examples of the group are at Florence (Reinach *Répertoire de la Statuaire* ii. 538. 5), in the British Museum 553 (of somewhat doubtful antiquity), in the Louvre 361 (*Jahrb.* 1901, p. 51), at Lyons, in the Dimitrion Collection at Athens. Schreiber *Arch. Anz.* 1899, 133 notices another from Egypt in the Sieglin Collection. The Florence and B.M. specimens agree with that in Constantinople. The Louvre group is too much mutilated for certainty.

seizes his opponent's right hand with his own right, placing his left hand on his neck and at the same time hooking his left leg round his opponent's left; then pressing his neck forwards he forces his right arm backwards, using it as a lever to twist him off his feet. The other as he falls instinctively puts out his left hand to save himself, and so falls with left hand and right knee to the ground. In the Constantinople type the victor seizes his opponent's right hand with his own left, and pulls it across his back, at the same time forcing his head forwards and downwards with his right hand, and



FIG. 26.—BRONZE. CONSTANTINOPLE. (After *Jahrb.* 1898, xi.)

twisting his left leg round the other's left leg. The fall is still more inevitable than in the first case. Besides the interesting examples of arm-locks and of tripping which these groups afford, we must again call attention to the fact that in all of them the wrestling is over, and there is nothing to suggest that the defeated wrestler must be thrown on his back.⁹⁶ He has fallen on his knee, and that is sufficient.

A special interest attaches to these groups when we compare them with the much disputed lines in the *Equites* of Aristophanes 261–263.

κᾶν τιν' αὐτῶν γυνῶς ἀπράγμον' ὄντα καὶ κεχηνότα
καταγαγὼν ἐκ Χερρόνησου διαβαλὼν ἀγκυρίσας
εἰτ' ἀποστρέψας τὸν ὄμον αὐτὸν ἐνεκολήβασας.

⁹⁶ Cp. p. 23 of this volume. So Förster *Jahrb.* 1898, p. 181 'Die *συμπλοκή* ist vorüber,' but when he goes on to say 'es ist zum *ἀκροχειρισμός* gekommen,' I cannot understand

what he supposes to be the meaning of *ἀκροχειρισμός*. It is a term used of the preliminary stages of boxing, and the pankration.

Prof. Mahaffy ingeniously explains the whole passage as an elaborate metaphor taken from the picking of figs, but whereas it seems unlikely that so simple an operation should need so many technical terms, the obvious appropriateness of every term to wrestling, and the constant reference to tricks of wrestling through the whole scene convince me that the primary reference at all events is to wrestling. A comparison with lines 491, 496 suggests that *διαβαλὼν* denotes throwing the arm across a person's neck. For *ἀγκυρίσας* the scholiast gives two explanations: 1. *ἀγκύρισμα*, a hook for pulling down figs. 2. *ἀγκυρίσας* = *ὑποσκελίσας*. There is no necessary inconsistency between the two ideas, and Aristophanes may well have intended to suggest both; but if one is to be excluded, it is certainly not the wrestling. *ἀγκυρίσαι*, 'to hook,' is an obvious synonym for *ὑποσκελίζειν* and is included by Pollux in his list of wrestling terms.⁹⁷ Wrestling terms, especially those denoting tripping, are in most languages used metaphorically to express cheating, and in Demosthenes we find the combination of the two metaphors, *ὑποσκελίζειν καὶ συκοφαντεῖν*.⁹⁸ *ἀποστρέψας τὸν ὄμω* needs no explanation; Prof. Mahaffy for the purposes of his theory alters *ὄμω* to *ὠμὸν*. The first and obvious meaning of all three terms then is in connexion with wrestling, and they denote three movements, seizing an opponent's neck, hooking his leg, twisting back his shoulder. Now these are the identical movements which are implied in the Constantinople and similar bronzes. Further, we must note that the attack is made from behind. This is the usual form of attack with boys playing tricks on one another, or hooligans assaulting innocent passers-by. The gilded youth of Athens as we know from the orators freely indulged in such horse-play, an excellent example of which occurs in Demosthenes in *Cononem*.⁹⁹ He describes how Conon and his sons set upon Ariston, and after stripping him *ὑποσκελίσαντες καὶ ῥάξαντες εἰς τὸν βόρβορον οὕτω διέθηκαν ἐναλλόμενοι κ.τ.λ.* In this passage *ὑποσκελίσαντες ῥάξαντες* and *ἐναλλόμενοι*¹⁰⁰ are words familiar in the palaestra; naturally the young bloods of Athens made use of the knowledge they had gained therefrom in assaulting those against whom they had a grudge. We see now how appropriate this language is in Aristophanes. The chorus are taunting Cleon with getting hold of simple old gentlemen from the country and fleecing them. 'Whenever you find such an one you fetch him home from the Chersonnese, and as the old gentleman is walking along unsuspectingly, you suddenly throw your arm across his neck, hook his leg, and pulling his shoulder back, *throw him to the ground*.' Such is the meaning which one would expect for the last word, but its actual meaning is obscure, and I cannot help fancying that Aristophanes has after his usual manner concluded with a humorous variation.

⁹⁷ Cp. Bekker's *An.* 81. 4, 327. 10 *κάμψας τὸν πόδα, σχῆμα δὲ ἐστὶ παλαιστρικόν.*

⁹⁸ *De Corona* 138, cp. Plato *Euthydemus* 278 B.

⁹⁹ C. 8. Bekker in his *Charicles* quotes the examples of Euergus and Meidias in Demos-

thenes, of Simon and Eratosthenes in Lysias, and of Demarchus in Aeschines.

¹⁰⁰ *ῥάσσειν* = to dash down, cp. LXX. Isaiah ix. 11, Eupolis *Ταξ.* 6 *ἀγκυρίσας ἔρραξεν*. For *λάξ ἐνάλλεσθαι* v. Pollux iii. 150.

Suidas explains the word as ἐπὶ κόλοις βαίνειν and adds κόλα δὲ ἡ γαστήρ. He further states that ἐνεκολήβασας is used for προσέκρουσας. This account agrees fairly with the scholiast's derivation of κολετράω in the *Nubes* 522. Here again Aristophanes is using the language, perhaps the slang, of the palaestra, and κολετράν apparently means to jump on an opponent's stomach when he is down, an unmanly proceeding of which Aristophanes protests he was never guilty. The scholiast explains the words variously as κατὰ κόλου τύπτειν, καταπατεῖν, ἐνάλλεσθαι τῇ κοιλίᾳ καὶ τύπτειν εἰς τὴν γαστέρα. The scholiast to the *Equites* also explains ἐνεκολήβασας as καταπέπωκας connecting it with ἄκολος which means, he says, ψωμός, a most improbable derivation. The meaning 'to swallow' could of course be easily derived from κόλον, the stomach, and all the evidence points to its connexion with this word. I should suggest then that it means 'to hit or kick in the stomach.' Such an action though not allowed in true wrestling was permitted in the pankration, and was doubtless as familiar to the school-boys and roughs of Athens as to those of the present day, and so Aristophanes appropriately concludes the tale of Cleon's knaveries with 'you hit him in the stomach.'¹⁰¹ If we look at the bronzes, we can see how easily the victor could kick his fallen opponent in the stomach with his right foot or hit him with his right hand.

The correspondence between the bronzes and Aristophanes' description need cause us no surprise. Most authorities regard the bronzes as of Alexandrian origin, copied from some well known Hellenistic group.¹⁰² The number of replicas which we possess is evidence of the popularity of the original statue and not merely of the statue but of the wrestling trick which deserved to be so commemorated. Förster identifies the victor in the Constantinople bronze with Hermes, the patron of wrestling. If the identification is correct, especially if the original statue represented Hermes, it is additional evidence of the popularity of the πάλαισμα. The original statue may have been Hellenistic, but the πάλαισμα which it represented need not be so limited in date. It was probably as familiar at Athens in the time of Aristophanes as it was at Alexandria under the Seleucidae, and we need not wonder that a trick so well known not only in the wrestling-ring, but in the streets should have furnished Aristophanes with a metaphor to express the trickery of Cleon, and at a later period should have been the motive of a notable work of art.

E. NORMAN GARDINER.

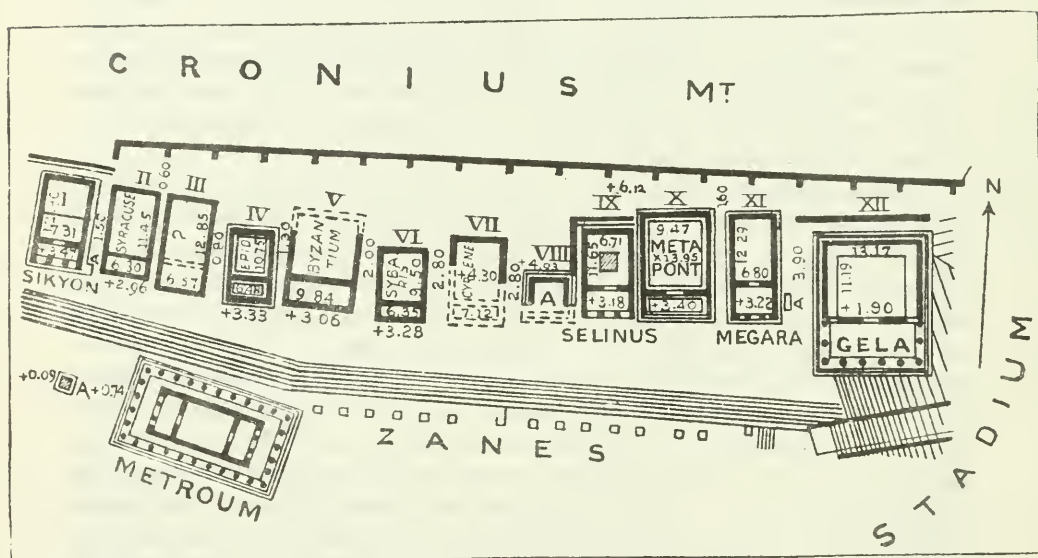
¹⁰¹ So in the passage quoted from Demosthenes, Conon and his sons after throwing Ariston in the mud proceed to jump upon him.

¹⁰² Förster *Jahrb.* 1893, p. 173, 1901, pp. 49-51; Perdrizet *Rev. Arch.* 1903, pp. 396-7.

(To be continued.)

OLYMPIAN TREASURIES AND TREASURIES IN GENERAL.

PROCEEDING along the terrace of the treasures, Pausanias devotes the nineteenth chapter of his second book on Elis to passing in review the whole row of them, naming each according to the Hellenic community by which it was built and dedicated. First he notes the Sicyonians' treasury, then the 'Carthaginians'' (Syracusans'). At this point begins a confusion in his text which culminates in the startling declaration that the third *and fourth*



THE REMAINS *IN SITU* OF THE ELEVEN TREASURIES
seen by Pausanias at Olympia on the Terrace at the foot of Mt. Cronius.

A = Altar. Figures preceded by (+) denote metres of height above O = level of the stylobate of the Temple of Zeus. Other figures denote horizontal metres; written between two buildings, they give interval separating them; written inside ground-plans, they represent dimensions.

treasuries are a dedication of the Epidamnians, a notable fact which he immediately denies by speaking of one and only one Epidamnians' treasury. After this he remarks that the Sybarites also built a treasury *next to that of the Byzantines*. This is disconcerting as he mentions the Byzantines' treasury nowhere else either before or afterwards. Next to the Sybarites' treasury, he then says, was that of the Libyans of Cyrene, in which he saw statues of Roman emperors. The Selinuntines, he proceeds to note, *built a*

treasury to Olympian Zeus before Selinus was destroyed by the Carthaginians; then he touches upon the treasury of the Metapontines as next to that of the Selinuntines. Finally he mentions the Megarians' and the Geloans' treasuries. Answering to these treasuries *ten* in number, unless we count the *two* attributed to the Epidamnians, twelve distinct foundations have been unearthed side by side on the stepped terrace skirting the southern foot-slope of Mt. Cronius. One of these however, No. VIII, counting eastward as is the established and convenient rule,¹ is neither of the size nor of the solidity required for a treasury.¹ The little that can be made out from the remains of what is usually miscalled the eighth treasury confirms the idea that it was no treasury of the Cyrenaeans or of any other community but a very ancient altar, perhaps an ash-altar. Its antiquity is proved not so clearly by the archaic features of its remains as by the high level at which its foundations were laid. Finally, since it must, if a treasury at all, be the Cyrenaeans' treasury, it is significant that the one fact recorded by Pausanias of the Cyrenaeans' treasury cannot easily be connected with No. VIII, which, if it had an interior at all, was absurdly small to contain statues of Roman emperors. Its outside dimensions are 4.42 by 5.78 metres, the longer measurement being in part due to its hypothetical restoration as a treasury. Nos. I-VII and IX-XII, the eleven foundations remaining, represent the ten treasuries connected by Pausanias with ten different communities which he names. The eleventh foundation cannot have belonged, as in our text of Pausanias, to the Epidamnians, nor is it reasonable to *read in* the Byzantines for its founders. Its founders were some Hellenic people unknown because their name has fallen out by a confusion of the scribes.² Really

¹ See A II p. 48, where Dr. Dörpfeld is doubtful, and A I, pp. 75 f., where he clearly proves the foundations and walls in this case to have been too slight to allow of more than an outside veneer applied to a solid core,—that presumably of an altar. Remains on the spot exhibit traces of heavy stucco coatings, and remains of a stucco moulding running about the base of this altar as about that of many others on the site. Dr. Dörpfeld suggests that this may be the altar of Gê, mentioned by Pausanias (VI xiv 10) just after his notice of the altar of Heracles lying west of the westernmost treasury (I). *N.B.*—References to A = *Olympia, Textband*.

² Böckh emended the fifth paragraph in Pausanias VI xix before the German excavations at Olympia shewed that there were eleven treasuries. Hence he connected the mention of the Byzantines' treasury,—absolutely required by the opening of paragraph seven,—with the fourth treasury, knowing that both the third and the fourth could not be given to the Epidamnians. Böckh's emendation prevented the excavators from an unbiassed consideration of

their *data*, and led them (a) to make sure, in spite of evidence to the contrary, that No. VIII was a treasury and not an altar, and (b) to persuade themselves, on what Dr. Dörpfeld lately assured me was not certain evidence, that Pausanias could never have had sight of Nos. II and III. Thus, by suppressing these two among the eleven *in situ*, and by mistaking No. VIII for a treasury, they made out that Pausanias saw only ten treasuries, the names of which he gives, I, IV-XII. This whole scheme breaks down through the establishment of two facts (a) that there is no convincing reason for supposing that a road up Mt. Cronius was carried over II and III before Pausanias saw the terrace and the treasuries,—on the contrary there is every reason to make us sure the road up to the summit was always where it now is, on the north side, the south side being too steep,—(b) that Pausanias saw and actually mentions eleven and not ten treasuries, although the name of one of them has fallen out of our text, which has also lost the words,—toward the end of VI xix 5,—in which he first mentions the Byzantines' treasury. See A I pp. 75 f.

there is uncertainty as to whether the missing name should be connected with III or IV, but the probabilities favour our considering IV to have been the Epidamnians' treasury. We are however certain of the names of I and II, and also of those of IX–XII. Nos. V–VII remain, and there is little doubt that to them apply, in due succession, the three names on Pausanias' list remaining, Byzantines, Sybarites, and Cyrenaeans. The only doubt arises from the parenthetical way in which the Byzantines' treasury (V) is mentioned. Probably, as Dr. Dörpfeld suggests, some mention of the Byzantines' has fallen out,—just before this parenthetical allusion,—at the end of paragraph 5. It is the less difficult indeed to take this view,—which involves the falling out, at the *beginning* of the same paragraph, of the name to be connected with III,—because not only 5 but paragraph 4 preceding it is in some confusion textually.

Such being the condition of our text in two of the fourteen paragraphs concerning the treasuries, it is a relief to know that, without any recourse to Pausanias whatever, we can name and identify Nos. I and XI. Upon the recovered fragments of the architrave of XI is inscribed *Μεγαρεων*, while *Σεκνονιον* is similarly cut on a stone of the eastern *anta* of I. Furthermore, XII, the Geloans' treasury, mentioned last by Pausanias and unmistakably located, is further identified by his quoting the inscription which he read upon it; while its remains, found in the walls of the Byzantine fort, clearly stamp it,—quite apart from anything in Pausanias,—as of Sicilian and Geloan construction. Two of the remaining nine, Nos. IX and X, the Metapontines' and the Selinuntines', can be identified by recourse to Pausanias without reference to the corruptions in his text, and without even deciding that No. VIII cannot be regarded as having been a treasury. If the conclusions³ about VIII are admitted, then there is no doubt or difficulty in identifying VII with the Cyrenaeans', VI with the Sybarites', and V with the Byzantines' treasury. Either III or IV, probably the latter, must be the Epidamnians', the name of III having been lost out of the text of paragraph 5. Finally the disorder of the text in the preceding paragraph 4 is not so complete as to leave any doubt that II is the Syracusans' 'Carthaginian' treasury.

For determining the *dates* of the several treasuries there are five methods of proof: (1) direct information given by Pausanias or another, (2) expert evidence as to the date of ascertained architectural features, (3) a comparison of differences in the levels at which were laid the foundations *in situ*, the presumption being that the earliest were laid on the highest or the lowest points of the ground available,⁴ (4) a general consideration of agreements and

³ The wording of Pausanias VI xix 7 excludes the notion of any altar or building between IX and X, whose walls in fact all but touch in their foundations, justifying our author's *προσεχής*; while he says of VI, the Sybarites', and VII, the Cyrenaeans' treasury: *πρὸς δὲ τῷ Συβαριτῶν Λιβύων ἐστὶ τῶν ἐν Κυρήνῃ θησαυρός*,

pointedly coupling VI and VII at the beginning of a sentence. His next sentence begins *Σικελιώτας δὲ Σελινουντίους*, and there is just room at the intervening full stop for an altar like No. VIII.

⁴ The facts about differences of level must not be pressed too far. Foundations at a mean

differences of alignment, (5) a scrutiny of the very unequal interspaces separating the foundations *in situ*, the presumption being that, given treasuries A, B, C, D, E built side by side, if the interspaces BC and CD, being equal, are also so much narrower than $AB=DE$ as to allow of it, then C was built later than A, B, D, and E, and crowded in between B and D. Finally, since novelty and variety played their part in securing to the Olympia their hold upon constant national resort to which the founding of treasuries bears witness, traditional dates for the introduction of new athletic events may be taken into account.

The highest ground upon the terrace is occupied by the foundations of the altar, No. VIII, and by those of No. VII,⁵ the Cyrenaeans' treasury. The lowest level lies on the extreme eastern verge of the terrace overhanging the Stadium, and is occupied by the Geloans' treasury, No. XII. The means of dating this fabric by evidence derived from style and workmanship have been vastly increased through the recovery of its shattered superstructure from the walls of the Byzantine fort. As a whole the building of the Geloans belongs to two periods: the earlier and principal part, built apparently like the Cnidians' Delphian treasury as a single chamber facing east and west, was aligned on the south side to the conjectural south front of No. VIII, the only structure found on the terrace by the Geloan builders. As between VIII, the ancient ash-altar, and XII, the Geloans' treasury chamber, VIII,—being on the highest level, chosen with reference to the primitive altar service of the sacred grove,—must have been the earlier foundation.⁶ Had the highest level been still open to their choice, the Geloans might indeed have preferred it as affording equal command of the Stadium and of the Altis. Architectural forms and characteristic decorations favour dating the original treasury-chamber of XII very late in the seventh century,—this is the testimony of architectural forms,—or very early in the sixth century B.C.,—this is the testimony of characteristic decorations. Gela was founded about 690 B.C. and is the earliest of Sicilian colonies to figure conspicuously at Olympia. About 100 years before the recorded chariot victory,—won by the Geloan Pantares, son of Menecrates, somewhere between Ol. 67 and Ol. 70 (512–500 B.C.),—the original treasury-chamber of XII was built. Its southward-facing porch presumably commemorates Pantares' victory, and was possibly patched upon the old treasury-chamber along with the three surrounding steps shewn *in situ*, by his sons Cleander and Hippocrates, tyrants of Gela from 505 B.C. to 491 B.C.

level, higher than the lowest and lower than the highest should not be grouped together chronologically on that ground. But see Dr. Dörpfeld A II. pp. 206 f.

⁵ The foundations of No. VII are mere trenches 0.3 m. deep filled in with sand and gravel. Small segments of walls still standing *in situ* shew a settling of 0.016 m. In fact these flimsy foundations are so primitive and so insignificant that, without their neighbours and the general statement of Pausanias about

the terrace, there would scarcely be reason to restore VII as a 'treasury.' See A II p. 48.

⁶ The antiquity of VIII is proved (1) by its occupying the highest level, (2) by the variation of spacing between it and No. IX on the east and No. VII on the west. The eastern part of the foundations of VIII is of marly limestone, its later western part is of poros. No clamps appear, but on some of the limestone blocks are left the bosses used in lifting them. A II p. 48.

Architectural remains date the building of this porch at the end of the sixth century or the beginning of the fifth century just as clearly as similar evidence dates the original treasury-chamber at the end of the seventh or the beginning of the sixth century B.C. But Nos. IX, X, and XI adjacent, and for that matter VII lying just beyond the altar (VIII), must have been built before Cleander's Porch, for they are aligned not to the front columns of this addition, but to the south side of the unaltered Geloan treasury-chamber beyond which Cleander's porch projects several yards southward. Accordingly, the date (505-491 B.C.) of the Geloans' porch gives a *terminus ante quem* to help our attempt at dating VII, IX, X, and XI.

With this *terminus ante quem* in mind, let us examine the plentiful remains of XI, recovered along with similar relics of XII from the east and west walls of the Byzantine fort. Here the evidence is clear. Workmanship, architecture, decoration, and sculpture all point to a time earlier than the fifth century B.C., agreeing with the *terminus ante quem*. As to a more definite date, we may conjecture the Megarians' foundation either to have coincided with the heyday of Megarian colonization,—675 B.C. (Cyzicus), 674 B.C. (Chalcedon), 662 B.C. (Selymbria), 657 and 628 B.C. (Byzantium),—or to have formed part of the ambitious architectural enterprises of the Megarian tyrant Theagenes, carried out all of them presumably in the last quarter of the seventh century B.C. On the whole the date of Theagenes seems the likelier of the two, and thus XI is dated not far from the end of the seventh century B.C.—later than the Geloans' treasury-chamber, but not necessarily earlier than No. X, which is also later than XII. No. X, the Metapontines' treasury, strongly resembles No. XII in its ground plan, to which that of No. XI offers a striking contrast as far as the relations of length to breadth are concerned. Moreover, if we suppose the site free with IX and XI not yet built and the Metapontines free to choose any site between XII and VIII, the location of X is easily explicable. X occupies ground as nearly half way between XII and VIII as the natural configuration of the terrace permitted. In order to secure higher ground, an interval of about 14 yards was left toward XII, and this reduced the interval toward VIII to 10 yards more or less. The most casual glance at a plan of this end of the terrace shews that IX was crowded in after the building of X; and XI, the Megarians' house, was obviously planned to suit the narrow space available toward the east after X was founded. How else can its quite new proportions of length to breadth be accounted for? No. IX, then, was undoubtedly of later foundation than X, and almost as certainly later than the Megarians' (XI), whose site, if unoccupied, would assuredly have been preferred. As Selinus was destroyed in 409 B.C. IX must have been built before that year. The material of its foundations,—hard limestone with shells, quite distinct from the poros of the Temple of Zeus,—is identical with that of its superstructure, and the workmanship of its superstructure, found on the site of the Prytaneum, dates it as of the sixth century B.C. It is likely therefore that the Selinuntines' treasury, founded after the Megarians', was built shortly before the end of the sixth century, while the Megarians' house still excited the emulation of Selinuntines

remembering that Hyblæan Megara from which they sprang was a Megarian colony, and not unmindful of the Hellenic credit achieved by Metapontum and Gela through their lavish expenditure of time and pains upon the building of Olympian houses. Keen emulation among flourishing young colonies must, I am confident, have played a large part.⁷ If we look now to No. VII, the Cyrenæans' treasury,—the last of those to which applies our *terminus ante quem* (505–491 B.C.),—its remains are so scanty and so shattered that we are forced to fall back upon the equal interspacing of Nos. V, VI, VII, and VIII,⁸ and to argue on that ground that V, VI, and VII must have been of approximately even date. Sybaris, however, was destroyed in 510 B.C., and No. VI,—the Sybarites' treasury,—must be dated accordingly. This gives us again, but with greater precision for V, VI, and VII, the *terminus ante quem* which applies to VII, IX, X, and XI. If a more precise date than *before* 510 B.C. for V, VI, and VII were required, the circumstance that XII certainly, and X most probably were founded not far from 600 B.C., and the fact that Sybaris, founded in 720 B.C., achieved its greatest prosperity with surprising rapidity,⁹ would favour a date not far from the middle of the sixth century for all three of them (V, VI, and VII); the more so because Dr. Dörpfeld's expert evidence touching the architecture of No. IX, the Selinuntines' treasury, dates it as belonging to '*ungefähr die zweite Hälfte des sechsten Jahrhunderts.*' Now the Selinuntines would hardly have chosen to crowd their house against that of the Metapontines and against the altar (VIII), unless V,¹⁰ VI, and VII had already preoccupied the space west of VIII—*this* argument favours the dating of V, VI, and VII shortly before the year 550 B.C.

Nos. I to IV still remain undated. I, when first discovered, was dated 480–477 B.C.; Dr. Dörpfeld however inclines to date it at least a generation later, because of an 'astragal' along the top of its frieze, which must, he suggests, have been imitated from the Parthenon. Would builders capable of borrowing so good a point have been content with the other details of No. I? These are all recovered because their scattered fragments, being of Sicyonian stone, have been identified. Their archaisms are glaring in the new light of Dr. Wiegand's studies of Athenian poros buildings. The Parthenon 'astragal' may derive from No. I, which, with all its archaisms, can hardly date much later than 480–470 B.C. As for II, the 'Carthaginian treasury' of the Syracusans, Pausanias dates it just after 480–79 B.C. and the battle of Himera. The fact that the earliest treasuries were crowded on to the

⁷ No one familiar with this phenomenon, exhibited in many forms by the rival cities which sprang up in the Mississippi Valley between 1820 and 1890, will ever underrate its energizing effectiveness.

⁸ The interval on either side of VII is 2·8 m.; that between VI and V is 2 m.; that between V and IV is 1·3 m.

⁹ Strabo p. 263: τοσούτον δ' εὐτυχία διήνεγκεν ἡ πόλις αὕτη τὸ παλαιὸν ὥστε . . .

¹⁰ Inspection of the remains of V yield few data. Its foundations on the south have completely disappeared. Its width is greater than that of any other treasury except the Geloans'. Like the Geloans' (XII) it had six columns in front. Curtius has pointed out that the Byzantines' treasury is likely to have been founded before 513 B.C., the date of Darius' Scythian campaign, after which the Byzantines were hampered.

eastern end of the terrace and the last built were towards the west would invalidate Dr. Dörpfeld's argument (A II p. 207) that II was early because of its level, even if its level varied strikingly from that of I, IV, V, VI, IX, X, and XI, which it does not. A glance at the plan of the terrace suggests that No. I may very probably have been built shortly after No. II, for it is separated from it by a convenient interval, is aligned to it on the south, and has its east side parallel to the opposite side of II. Turning now to Nos. III and IV, we remember that one of these, probably the one earliest built, was a dedication of the Epidamnians. No. IV, like Nos. XII, and I, is of a material unique on the site, and probably imported. White limestone splinters found near its foundations help to identify its superstructure, whose scattered relics have been identified solely by their material. Called upon by the then accepted, and still prevalent view which ignores Nos. II and III, to identify these white limestone remains with the second (Syracusan) treasury of Pausanias, Dr. Dörpfeld, A II p. 46, pronounced them far too archaic for a building commemorative of the victory of Himera, and fixed their date as toward the middle of the sixth century B.C. This date does not ill sort with the regrettably vague indication or hint given by Thucydides as to the time when Epidamnus, not yet distracted by factions, was most prosperous.¹¹ Having dated V, the eastern neighbour of IV, at about 550 B.C., note that, whereas two metres intervene between V and VI, only one and three-tenths metre intervene between V and IV. This implies that IV was crowded in after V was built, and agrees with the date shortly after B.C. 550, attached by experts to the architectural remains of IV. No. III remains. It was certainly crowded in after II and IV were built, and may be conjecturally made out as of about the same date with I, which was also built after II, *i.e.* after 480-79 B.C. To sum up results, the order in which presumably the twelve foundations *in situ* on the terrace of the treasuries were successively laid is: VIII, XII, X, XI, VII, VI, V, IX, IV, II, III, and I. All excepting only I, II, and III were certainly founded in the sixth century. I, as we know, in some sense takes the place of a much earlier dedication,¹² and II was founded in commemoration of the victory at Himera. Only I and XI, among all these locally planned and dedicated houses, are the gifts of Hellenic communities of Greece proper, eight of them certainly, and quite possibly also a ninth,—No. III, of unknown origin,—were built by colonists.

¹¹ Epidamnus was founded in 625 B.C. After its foundation, says Thucydides, as time went on (προελθόντος δὲ τοῦ χρόνου, I xxiv 3) it became a flourishing place (μεγάλη). Allowing three generations for this growth, we have *ca.* 525 B.C. for the foundation of IV, if IV was the Epidamnians' house. The only circumstantial evidence that is lacking is in regard to the white limestone used in building IV. Nothing of the kind has been found at Syracuse. If a thorough search on the site of Epidamnus were to shew this limestone abound-

ing there as the tawny sandstone of I abounds at Sicily, then IV might be named the Epidamnians' treasury with more confidence.

¹² Proofs of this as indicated by Ernst Curtius are chiefly *a priori*, but there is also (1) Pausanias' statement that Myron founded I, obviously built long after Myron's day, and (2) the fact that tiles clearly belonging to an archaic building were found among the broken stones on which are bedded the foundations of I.

During the seventh and sixth centuries the management at Olympia so varied and multiplied new events in the games as to reinforce their religious appeal in a manner peculiarly attractive to colonists, and so the era of treasuries chiefly colonial is a notable chapter in the history of the consolidation of a truly pan-Hellenic consciousness. The Geloans' foundation came when various new events for boys had been introduced. In the east Byzantium, Prusias, and Apollonia, in the west Massilia were new colonies then, and new also was the Delphian treasury of Cypselus. About the time when this treasury was rebaptized (in 581 B.C.) and called the treasury of the Corinthians, came the Metapontines', the Megarians', the Cyrenaeans', the Sybarites' and the Byzantines' Olympian houses. These, with the Selinuntines' and the Epidamnians' foundations, finally fixed upon Olympian treasuries their association with broader and more inclusive conceptions of religious service,—such as were contemporaneously manifested at Athens under Pisistratus. Of all this more anon. The last point here to be made is that the victory of all Greece against the barbarians having been commemorated by the Syracusans' Carthaginian treasury, closely followed by the dedication of III and I, there was no further call for the founding of new treasuries.

Treasuries in General.

The term *θησαυροί* was on the whole a misnomer, and its unquestioned currency has given rise to misapprehensions both in antiquity and in later days,—misapprehensions only to be removed by getting at the buildings themselves and their contents. Herodotus understood their uses in an old-time sense which had already suffered much modification when he wrote.¹³ Strabo's definition, if rightly emphasized, is sufficiently comprehensive to cover all the senses, earlier and later. He attributes in part the greatness of Delphi to its *θησαυροὶ οὓς καὶ δῆμοι καὶ δυνάσται κατεσκεύασαν, εἰς οὓς καὶ χρήματα ἀνέτιθεντο καθιερωμένα καὶ ἔργα τῶν ἀρίστων δημιουργῶν* (p. 419). But in this definition the word *καθιερωμένα* requires great emphasis, and the word *δυνάσται* must be blotted out, if we wish the description to apply to the Olympian treasuries founded after the Geloans' treasury-chamber was built. Call such buildings *θησαυροί* with Herodotus and Pausanias, use with the expert antiquarian Polemo one word, *θησαυροί*, at Delphi, and another, *ναοί*, at Olympia; or take from Delian and Delphian inscriptions the sacral term *οἶκος*, two things hold of all treasuries like the Olympian ones: (1) they are built for the worship of a god, (2) they stand for the glory not of any one dynast, but of every member of some one Greek Demos.¹⁴ Far wider of the mark than Strabo's is Baehr's definition founded

¹³ See i 14, where he says the Corinthians' treasury at Delphi was properly Cypselus', and iv 162, where he speaks of the censer of Euelthon of Cypriote Salamis in the Corinth-

ians' Delphian treasury. Contrast however iii 57 on the Siphnians' Delphian treasury.

¹⁴ This makes it absurd to class either the Leonidaetum or the Philippeum among *θησαυροί*.

on Herodotus and innocently intended as a translation of Strabo: *Aedienlae sive cellae in Delphico templo*. The last four words are added by way of being precise.¹⁵ W. J. Fisher sought precision in another extreme. Full of what at that time were called Agamemnon's Mycenaean treasury and the Orchomenos treasury, he sought the Olympian treasuries of Pausanias not only as he should outside of any temple, but also as he should not outside of the Altis itself on the slope of Mt. Cronius. His search was rewarded by the discovery of a brick-kiln which had the undoubted merit of being circular.¹⁶ Bötticher,¹⁷ renouncing all hope of precision at a time when neither Delos, nor Olympia, nor yet Delphi had been excavated, distinguishes between treasuries erected in connexion with tree-worship,—this class although more ancient than temples includes the Olympian treasuries,—and treasuries erected near Hellenic temples. Finally he enumerates twelve Olympian treasuries, the first being the Heraeum and the twelfth the Philippeum, neither of which is ever spoken of as a treasury by ancient writers. Such in fact was the confusion about Olympian treasuries that it has not been dispelled even by the final appeal to the spade until now, when both Olympia and Delphi have been thoroughly excavated. Herodotus, Strabo, Athenaeus, Pausanias, and Plutarch though often occupied with the Pisatan and Parnassian treasuries have not a word about the communal houses (treasuries) at Delos, the first discovered buildings of this class. So little could be made out at Delos that discovery was doomed to wait long upon understanding.¹⁸ It has not even now been possible to identify at Delos any one of the several buildings whose foundations shew them to be treasuries after the Olympian and Delphian pattern. All these communal houses are special cases of the *templum in antis*, each consisting of a small rectangular chamber fronted by a shallow porch and having no *ὀπισθόδομος*. There is, then, no doubt remaining as to what a treasury or communal house was; but only three of the Delphian treasuries are identified and named beyond a peradventure, so that the eleven Olympian buildings on the terrace take their place, along with the Sieyonians', the Thebans' and the Athenians' Delphic treasuries as the monuments with which we are chiefly concerned. Foundations alone yield little more than the typical plan just described and based alike upon remains at Delos, Delphi, and Olympia.¹⁹

¹⁵ Note on Hdt. i 14 (1856).

¹⁶ See Bötticher's *Olympia* p. 225, on Fisher's visit to Olympia in 1853.

¹⁷ *Tektonik* pp. 434-454; *Baumcultus* pp. 156-162.

¹⁸ The foundations of six small buildings were found at Delos before anything of the kind was turned up elsewhere. Of these one was presumably the temple of Eilithyia mentioned in the inventories. The five others were 'treasuries.' Of these the two largest were probably the *Ἀνδρίων* and the *Ναξίων οἶκοι* (treasuries) of the inventories. Of the remain-

ing three, two were probably the *Αυδίων* and the *Δηλίων οἶκοι* of the inventories. These last supply no name for a fifth treasury, since the *πύρινος οἶκος*, frequently mentioned, is identified with a large square building quite away from the group of the communal houses clustering around the Letoon and the temple of Apollo.

¹⁹ The Olympian treasuries, V and XII, vary from the *templum in antis*, XII having a south porch with six columns and no *antis*, V being a regular Doric hexastyle building. For the absent *ὀπισθόδομος* see below p. 307.

Much more than this is fortunately known of the Megarians', the Geloans' and the Sicyonians' houses at Olympia and at Delphi of the Athenians' house and of one the name of which is in dispute, but which I hope anon to shew was the Siphnians' not the Cnidians'. These five very completely recovered monuments constitute one of the most interesting groups of Hellenic buildings of a sacral character now open to our study.

Pausanias throws some light on the uses, religious and other, to which these treasuries or communal houses were put, in giving some of the motives and occasions for their foundation. The most obvious motive, one which can never have been wholly absent, was sheer piety toward the god of the sanctuary. Pausanias (X xi 5) credits the men of Thracian Potidaea with this motive at Delphi. To it might attach some vague idea of atonement for previous neglect, such as lurks perhaps in the record of the Siphnians at Delphi (X xi 2), or some impulse of Hellenic thanksgiving for victory such as prompted the Athenians at Delphi (X xi 5), or the Syracusans in building their 'Carthaginian treasury' at Olympia. In the later day of Greek particularism, a more parochial patriotism prompted Brasidas and the Acanthians to build their Delphian house with spoils from the Athenians, whose catastrophe at Syracuse was commemorated at the same sanctuary by the Syracusans' Delphic treasury. The Spartan disaster at Leuctra was similarly represented, again at Delphi, by the Thebans' treasury; but no communal house at Olympia,—unless we can make something out of Pausanias' statement about the Megarians' treasury (VI xix 13),—was built with means derived from the spoliation of one Greek town by another. Finally Pausanias recognizes in connexion with the Cnidians' house at Delphi the possible impulse for display which might prompt a pious community at a season of prosperity to figure at Delphi as the wealthy founders of an ornate treasury.²⁰ Herodotus suggests by unmistakable implication the same motive for the building of the Siphnians' house at Delphi (iii 57), nor can it be doubted that the Geloans at Olympia congratulated themselves upon the splendours of their gorgeously decorated Olympian treasury-chamber. The sumptuous house by which the Cnidians advertised their prosperity to the frequenters of Delphi was, if I am right, nothing more nor less than the famous Lesche, glorified by the 'earliest and most renowned compositions of Polygnotus. As to the beauties of the Siphnians' treasury at Delphi, which so impressed Pausanias and Herodotus, seeing is believing. Otherwise such a jewel of a building could not be credited to so early a period.

The inferences to be drawn from this review are two: (*α*) that, whenever a treasury was founded, two deeply underlying currents of enthusiasm and loyalty met and took on a visible shape,—loyalty to the service of the god, enthusiasm for the glory of the state. The choice of a far-off site testifies to some quickening of religious experience, and the difficulties overcome in detail are eloquent of some thrilling and uplifting home crisis. To build anything at Delphi or Olympia was not easy in days when transportation

²⁰ X xi 5: Κνιδίους δὲ οὐκ οἶδα εἰ ἐπὶ νίκη τινὶ ἢ ἐς ἐπίδειξιν εὐδαιμονίας ᾠκοδομήσαντο.

was so difficult. The pains of planning and fashioning a treasury like the Geloans, built at a time when the arts were still in their swaddling clothes, are more easily described than realized. Clearly, the Athenians and the Syracusans building their treasuries at Delphi and Olympia were in the throes of a new national birth, and yielded to the same characteristically complex impulses that have fixed upon the Feast of the Annunciation as the Independence Day of Modern Greece. The second inference is (*b*) that wealth lavishly, ostentatiously even, bestowed upon a Delphian or Olympian *θησαυρός* of the kind in question,—a communal house, that is to say,—did not take the form of sumptuous and costly gifts, stored in that house as a strong box.²¹ The expenditures of the Geloans, the Siphnians, and the Cnidians respectively were upon the house itself, and had little or nothing to do with anything treasured in it for safe-keeping.

In the light of this last inference a puzzling paradox of Pausanias touching the Sicyonians' treasury at Delphi becomes easier to understand. Having mentioned that fabric, he goes on to say: *χρήματα δὲ οὔτε ἐνταῦθα ἴδοις ἂν οὔτε ἐν ἄλλῳ τῶν θησαυρῶν*. His meaning may perhaps be thus paraphrased: Since this is a *θησαυρός* one would naturally expect it to contain treasure (*χρήματα*), but as a matter of fact neither this nor any other of the houses called treasuries contained *χρήματα*. Treasuries, that is to say, are so called because there are no treasures there.²² Pausanias means at all events to distinguish the meaning of *θησαυρός* as applied to communal houses from its usual meaning as attached to buildings or strong-boxes for the safe-keeping of valuables. The *θησαυρός* of King Croesus was such a *θησαυροφυλάκιον*.²³ However, Pausanias can hardly have had just such a secular *θησαυρός* in mind, but rather the consecrated *θησαυροί* = *θησαυροφυλάκια* attached to temples or built within precincts,—used, all of them, for nothing but the storage of *χρήματα*, *i.e.* specie or its equivalent. Such was the *θησαυρός* at Oropus of which we have details suggesting²⁴ a mammoth stone 'poor-box' like one just discovered in the south-eastern porch-corner of the old temple at Corinth. From Eleusis²⁵ we have minute record of sums taken from treasuries belonging respectively to Demeter and Persephone. Lyces, who opened them, gets his fee and then Lycurgus provides for an expiatory sacrifice (*ἀρεστηρίαν θύσαι*) for the technical sacrilege involved. These Eleusinian treasuries were probably independent stone structures or treasure-vaults built somewhere within the precincts, but can hardly have borne even the most remote resemblance to a Delphian or an Olympian communal house.²⁶ Instances might be multiplied from inscriptions shewing

²¹ See Hdt. iii 57 *ad fin.*

²² Pausanias often uses the word *χρήματα* for what we sometimes call treasure.

²³ Hdt. (vi 125, ii 150, vii 190) uses *θησαυρός* for any sort of treasury or treasure-box: see ix 106, where it has the sense of safe or strong-box. Cf. Suidas, *s.v.* *θησαυρός*. 'Αππιανὸς ὅπλα τε πολλὰ καὶ σίτον ἐτοιμάζετο, καὶ θησαυροφυλάκιον. This last = *θησαυρός* in Herodotus and

Pausanias. Contrast Strabo's account of *θησαυροί* carried off from Delphi by the Tectosages and consisting apparently of ingots of gold and silver (IV p. 188).

²⁴ Ditt. 589, 411–402 B.C., or 386–377 B.C.

²⁵ Ditt. 587, 11. 302–309, or 329–8 B.C.

²⁶ Ditt. 653, 11. 90–96: where are given details inspired from Eleusis and providing for the building of a treasury sacred to Persephone.

the habitual use of *θησαυρός* = *θησαυροφυλάκιον* in all official records.²⁷ We shall, then, only conform to strict sacral terminology in discarding the term *θησαυρός*, and in using henceforward for the communal foundations at Delphi, Delos, and Olympia the Delian sacral term *communal house*, *οἶκος*, as used in the Delian inventories.²⁸

Money-box or strong-box treasures attached to temples or built near-by have, then, little or nothing in common with the miniature temples under discussion. Small though these were, their size forbids the notion of a mere strong-box, and the time, pains, and treasure lavished upon their construction put it quite out of court. They certainly contained no deposits of specie, and we hear of no precautions or prescribed arrangements for opening and closing them.²⁹ They were kept under lock and key like other temples and depended for their inviolability upon the same unwritten laws that protected temples. Like temples, they were closed at night, and Athenaeus (XIII p. 606), where he records episodes illustrating the effect of various paintings and statues on several animals and certain clodhoppers, culminates with the tale of Cleisophus of Selymbria³⁰ in the temple of Samos as recorded by Alexis and Philemon,³¹ and caps the climax with the adventure of 'one of the theors' in the communal house of the Spinatai³² at Delphi. Abnormally

Minute regulations about the keys and their custody are entered into.

²⁷ See Ditt. 629, where seven men are put in charge of an Olbian *θησαυρός* and sums to be deposited by worshippers sacrificing are enumerated (third century). See also a Pergamene inscription (566, 12), and a Halicarnassian inscription (601, 30).

²⁸ In these *θησαυρός* applies strictly and solely to various *θησαυροφυλάκια* or strong-boxes within the precinct and in one case inside a temple. For 'treasuries' such as Pausanias saw on the Olympian terrace, the invariable word used is *οἶκος*.

²⁹ For formalities, not unlike those observed at Eleusis though simpler, see *I.G.* I, 1570.

³⁰ Selymbria was founded in 662 B.C. by the Megarians a little before they founded Byzantium (657 B.C.), and ceased to be on the high-road of any lucrative trade as soon as Byzantium on the east (42 miles distant) and Perinthus on the west (22 miles distant) were founded. The presence of Selymbrians in the temple of Samos, the metropolis of Perinthus, was doubtless in the natural course of events, when Perinthus shot ahead of Selymbria as apparently it did long before the end of the Peloponnesian war. Indeed Selymbrians had a fierce life of it in the face of their constant exposure during more than 2000 years to raiders from Thrace, who made it very difficult for them to maintain their hold on Hellenic traditions and culture. Xenophon's friend, Clearchus, spoiling for a

fight at the close of the Peloponnesian war, went out with a squadron to attack the Thracians *ὑπὲρ Χερρονήσου καὶ Περίνθου*, as Xenophon has it (*Anab.* II vi 2), describing the district of Selymbria. The very name of Selymbria is Thracian and not Greek. The readiness of the Thracians to raid Selymbria is well illustrated by Plutarch's account of the proceedings of Alcibiades after the battle of Cyzicus (410 B.C.), when one of his chief motives for giving easy terms to Selymbria was fear that his Thracian contingent would get out of hand (*Alcib.* 30, cf. *Xen. Hell.* I i 21). Selymbria thrived, while fighting with Thracians or Macedonians was the order of the day, but sank under Philip of Macedonia only to emerge as an outpost for the defence of Constantinople in Byzantine days. When Anastasius I was hard pressed by the Bulgarians in 507 A.D., he built a wall from Selymbria nearly 30 miles across Thrace to Delkon on the Euxine. The last memorable siege of Selymbria was that by the Genoese against whom it was stoutly defended by Manuel Phakrase Cantacuzene in 1341 A.D.

³¹ Philemon was born about 359 B.C., his death was about 262 B.C. Alexis was his senior by about twelve years.

³² Spina in the valley of the Po seems, like Selymbria, to have been out of touch with the main current of Hellenic culture, in spite of the comparatively ancient legend of its Hellenic foundation by Diomedes, and of a certain early prosperity witnessed to (a) by the Delphian

excited by the vision of statues these Graeco-barbarians got themselves locked up overnight,—Cleisophus in the Samian temple, the Spinatan delegate in the Spinatan house. Both were from semi-barbarized surroundings and unaccustomed to the naturalistic perfections of Greek sculpture. Athenaeus goes on to say that the delegate was detected and that the Delphians consulted the oracle as to punishing him. The reason for letting him off given by the oracle stamps the anecdote as an unsavoury fiction, but nevertheless its value for the present argument remains unimpaired. There may be no actual facts behind it, excepting only that it was sufficiently well invented to be current at Delphi. In a word it embodies certain accepted customs into which it weaves familiar Rabelaisian strands. Its setting, which is genuine, alone concerns this argument. Take the two stories as combined. Does not Athenaeus, by grouping them together, with the Spinatan incident at the close, clearly imply that the desecration of a Delphian communal house presented itself in the same light with the desecration of a world-renowned temple like the Samian Heraeum? This means that Polemo's word *ναός*, used for the Olympian communal houses, was based upon conceptions current at Delphi as well as at Olympia. If now we take the Spinatan episode alone, does not the selection of an official theor imply as a matter of course certain special rights of access to the treasury of Spina for each Spinatan delegate?

Other arguments are not lacking to establish the justification of Polemo in identifying communal houses with temples. The orientation of the oldest Olympian treasury (XII) is that of a temple. Convenience and the relative position of the terrace dictated a southward frontage for all the other houses, and finally necessitated a change of front for that of the Geloans. At Delos and at Delphi all the treasuries seem to have been oriented with reference to the sacred way. The strongest argument however always remains the familiar one that each house is in plan a miniature temple, and this becomes practically irresistible at Olympia when due weight has been given to a recorded and very noticeable detail in the foundations of the Sicyonians' house (I), which reappears, though less clearly, in the foundations of the Megarians' house (XI). 'There is' says Dr. Dörpfeld, A II p. 41, speaking of No. I, 'a broadening of the foundations which is totally inexplicable. Can it not be a mere dislocation, you might ask. Certainly not, since the stones at this south-eastern corner are where they were originally

treasury of the Spinatae, and (b) by the name *Spineticum ostium* borne by the southern mouth of the Po throughout antiquity and long after the day when Spina had seen its harbour silted up and itself transformed into an obscure inland town. The mouth at Ravenna was artificially made by the *Augusta fossa*. North of this was the *Eridanum ostium*, named for the short tributary *Rhenus*, but also named the '*Spineticum ostium*,' says Pliny, '*ab urbe Spina quae fuit juxta praevalens, ut Delphicis creditum est thesauris, condita a Diomele.*' Of

Spina's obscurity all ordinary maps of the district of the *Lingones* assure us for it appears on none of them. Strabo's account (v. p. 214b) exhausts all the facts known: μεταξὺ δὲ Βούτριον τῆς 'Ραουέννης πόλισμα καὶ ἡ Σπίνα, νῦν μὲν κώμιον πάλαι δὲ 'Ελληνὶς πόλις ἔνδοξος. θησαυρὸς γοῦν ἐν Δελφοῖς Σπινητῶν δέικνυται, καὶ τὰλλα ἱστορεῖται περὶ αὐτῶν ὡς θαλασσοκρατησάντων. φασὶ δὲ καὶ ἐπὶ θαλάττῃ ὑπάρχειν, νῦν δ' ἐστὶν ἐν μεσογαίᾳ τὸ χωρίον περὶ ἐνέηκοντα τῆς θαλάττης σταδίου ἀπέχον.

laid. No doubt on this point is possible. The idea that here is the foundation of an altar belonging to the treasury has been suggested, but such a supposition has not a leg to stand on.' I venture to hope that some support for this supposition has been found, and that Dr. Dörpfeld may alter his mind in case he does me the honour of reading this paper. Perhaps he may allow the eastward splaying of the foundations of the portico of No. XI to suggest a similar altar there. Then we may note that space forbids any but a *south* altar for Nos. IX, X, V, IV, III, and II, and let this in part explain why all the treasuries hugged the northern verge of the terrace. We may further note that, for all we know to the contrary, VI and VII may have had eastern or south-eastern altars. Altars adjacent agree well with the general temple-seeming plan of these communal houses. Even without pressing the analogy of the temple, Pausanias' account of the house of Oenomaus (V. xiv. 7) encourages the idea of an adjacent altar of Zeus 'Ερκεῖος. Here let it be noted however that there would not have been room at Olympia for an opisthodomos, supposing even that feature of the full-blown temple had been desired. For the striking resemblance of the temple and the communal house, Strabo is a capital witness. In his casual glance at the precinct of Samian Hera, he hits off admirably the contrast between the treasuries and the colossal proportions of the Heraeum there,—proportions which amazed Herodotus,³³—by calling the 'treasuries' near by *ναῖσκοι*,³⁴ as who should say pocket-temples. The almost comic disproportion between such puny sentry-box structures and the mammoth Heraeum at Samos was fortunately reproduced neither at Olympia,—where the archaic Heraeum was of comparatively moderate size and of exceptionally modest height, while the 'treasuries' were lifted above its level by the height of the terrace on which they were built,—nor was there any such incongruity at Delos, where two smaller temples stood by the largest—though by no means large—temple in the precinct, and insensibly prepared the eye for the still smaller treasuries stationed beyond it.

Grounds have been thus far presented for consideration, sufficient I conceive to distinguish communal houses from *θησαυροί* = *θησαυροφυλάκια*, and to shew that communal houses presented themselves to the mind's eye of the ancients as temples of a sort. Evidence is now in order to shew what distinguished these communal houses from temples pure and simple, and to establish for the delegates of any city-state which had founded a treasury some special privileges of customary access and habitual resort. Obviously their size distinguished all such communal houses from temples near by and far away. This contrast was made complete by the absence in communal houses of anything like a cultus-image. Moreover, each of these houses,

³³ iii 60: *νῆδος μέγιστος τῶν ἰδμεν*. Herodotus goes out of his way to descant upon the Samian Heraeum as one of the three 'biggest things in the world,' all of them at Samos.

³⁴ See p. 637: τὸ 'Ηραῖον ἀρχαῖον ἱερὸν καὶ

νεῶς μέγας, δς νῦν πινακοθήκη ἐστί, χωρὶς δὲ τοῦ πλήθους τῶν ἐνταῦθα κειμένων πινάκων, ἄλλας πινακοθήκας καὶ ναῖσκοι τινὲς εἰσι πλήρεις τῶν ἀρχαίων τεχνῶν.

although seriously ³⁵ dedicated to the god of its precinct, was primarily thought of as pertaining to the citizens of the dedicating community. Accordingly the full technical designation of the Andrians' Delian house was *οἶκος ὃν ἀνέθησαν* (= *ἀνέθεσαν*) *οἱ Ἄνδριοι*, the name of the god being taken as a matter of course. On the Athenians' house at Delphi was written *οἶκος Ἀθηναίων*. The single word *Μεγαρέων* stands on the architrave of the Megarians' Olympian house, while *Σεκυνώνιον* is inscribed on one of the *antae* of the Sicyonians' house on the same terrace. Plutarch opens his life of Lysander by saying that the *Acanthians' treasury* at Delphi bears the inscription *Βρασίδας καὶ Ἀκάνθιοι ἅπ' Ἀθηναίων*, and the last words in Pausanias' chapter on the Olympian treasures record that he saw engraved on the Geloans' treasury words to the effect that the treasury and the statues inside were the Geloans' *ἀνάθημα*. 'But,' he adds, 'the statues are no longer there.' This would be perfectly matched by the inscription found at Delphi: *τὸν θησαυρὸν τόνδε καὶ τὰ γάλματα*, if only the initial word had been recovered. M. Homolle now conjectures for it the name *Κνίδιοι*, although, when he held that the communal house on one of whose steps it was apparently engraved, was the Siphnians', he would have conjectured *Σίφνιοι*.

Thus we see that a communal house, unlike a temple, required to be labelled, as it were, and that the essential word used was always the name of the dedicating community. No individual's name could permanently attach itself to a house of this kind, since Plutarch in the same breath tells of the inscription *Βρασίδας καὶ Ἀκάνθιοι*, and speaks of the building so inscribed as the treasury of the Acanthians. Herodotus also protests quite in vain that the Delphian treasury of the Corinthians ought properly to be called the treasury of Cypselus, since Cypselus was its founder (i 14). Again Pausanias is demonstrably in a confusion of mind when he says that the Sicyonians' house seen by him on the Olympian terrace was dedicated by Myron, the Sicyonian tyrant who won the chariot race in 648 B.C. Its foundations as visible are especially strengthened to bear the enormous weight of Myron's *θάλαμοι* which weighed, Pausanias tells us, 50 talents, or 13 tons according to Dr. Dörpfeld's estimate. An inscription, seen by Pausanias on the smaller of the two, said they were dedicated by Myron and the *δῆμος* of the Sicyonians. Whatever this may imply about a former Sicyonian house at Olympia the one which we know was ear-marked as the Sicyonians' and not Myron's.

The houses under consideration, then, being temples of a sort, and dedicated to the god, were nevertheless unique in proclaiming a sort of right of joint ownership inherent in the dedicating community. This right carried with it certain responsibilities,—charges laid upon the founders for the solidity of the fabric. M. Homolle has found, on the high retaining wall upon which was built the Cnidians' communal house, commonly known as the

³⁵ Pausanias VI xix 1: *ἐπὶ ταύτης τῆς Δελφοῖς Ἑλλήνων τινὲς ἐποίησαν τῷ Ἀπόλλωνι θησαυροῦς.*

Cnidians' Lesche, a marble slab,³⁶ bearing the inscription : Κνιδίων ὁ δᾶμος τὸ ἀνάλαμμα Ἀπόλλωνι, in characters of the third century B.C. Now Polygnotus painted the newly erected Lesche not later, but probably earlier than 467 B.C., the date of Simonides' death.³⁷ And so the Cnidians charged themselves with building at no slight expense a retaining wall to solidify the foundations of their house 200 years after they originally built and dedicated it. We know that the Sicyonians, supposed not without good reason to have built one of the earliest of Olympian houses, planned in Sicyon their second communal house, quarried, fashioned, and lettered so far as necessary its every stone at Sicyon, and finally laid its foundations in or near 450 B.C. at Olympia, taking pains to strengthen it to support the θάλαμοι dedicated by their forefathers 200 years before. We are forced to admit that similar pains were taken by the Geloans *ca.* 610 B.C. when they built their treasury-chamber, and again 100 years later when they set steps around it and added on its porch. It is clear then that the Cnidians, the Sicyonians, and the Geloans continuously rose to their full responsibilities for the maintenance of their respective communal houses. The same may be asserted with some probability of the Andrians and their Delian house.

It is not, I submit, humanly conceivable that such responsibilities shouldered during such extended periods of time should have failed to imply and involve corresponding privileges,—privileges best indicated one would think by the intimations of joint ownership engraved as we have seen on the fronts of so many of the monuments under discussion.

But now arises the question as to why the foundation of communal houses so actively pushed forward at Olympia during the seventh and sixth centuries B.C. suddenly and completely ceased there after the Persian wars were well over. Before this question can receive its detailed answer, various minutiae, chiefly historical, require attention. Long before the awakening of pan-Hellenic consciousness among Greeks, Olympia and Delphi occupied the popular imagination as places constantly resorted to with costly gifts by the potentates of the earth, Greek and barbarian indiscriminately. This was particularly true of Delphi and of Delos; Olympia was hardly connected with non-Hellenic benefactors. Such discrimination as there came to be made between Hellenic and barbarian gifts must have grown up one would suppose in connexion with their bestowal for safe-keeping. This in turn must hang together with the springing up of local treasuries at Delphi and elsewhere. Delos,—directly accessible from Asia by the sea,—yields the only instance of a non-Hellenic treasury, in the Delian οἶκος Λυδῶν. Great as were the Delphian privileges of Croesus and the Lydians (Hdt. i. 54) there was never at Delphi an οἶκος Λυδῶν. At Olympia the barbarian appears never to have received any analogous recognition of any kind. Barring the single exception,

³⁶ See Frazer's *Pausanias*, V, pp. 357 ff.

³⁷ See H. Brunn, *Geschichte der Griechischen Künstler*, ii, pp. 11 f., where it is observed that Simonides may have written the lines quoted by Plutarch, *De Defectu Oraculorum* (ch. xlvi,

p. 447) while in Sicily. This is possible but rather forces the situation. It seems more likely that Simonides wrote the lines at Delphi, and saw the paintings there before his departure for Sicily in 477 B.C. or earlier.

then, of the Lydians' house at Delos the privilege of building and dedicating a communal house at Delphi, Delos, or Olympia was exercised solely by Greeks; but only at Olympia were non-Greeks completely out of court, so to speak, from the very beginning,—only at Olympia was the new-Greece of the era of colonial expansion overwhelmingly preponderant in the matter of founding communal houses. At first however the founders were not Hellenic *δῆμοι*, not communities, but potentates or tyrants. Myron of Sicyon and Cypselus of Corinth, who should perhaps be placed a little before Myron, were among these early builders of treasuries, when treasuries had not yet developed into communal houses. The fact that Cypselus of Corinth built a Delphian treasury which was afterwards appropriated by the people is established on the most solid of evidence, and upon this fact, as commented on by Herodotus, Plutarch, and Pausanias, chiefly depends our knowledge of a transformation in the use of the buildings under discussion which deserves to be recognized and viewed in all its bearings; the more so because this new fact may clear away many obscurities still hanging about the various designations, alike in technical and in current speech, by which these monuments were known to the ancients.

The name *θησαυρός*, which in the main should be associated with the communal houses at Delphi, and not with those of Olympia and Delos, perpetuates the lingering idea of a sort of individual and personal ownership. Until it was formally appropriated by the Corinthians, the Corinthian treasury at Delphi was not the Corinthians' treasury, but the treasury of Cypselus. This last became the communal house of the Corinthian *δῆμος*, only after the Delphians, upon formal summons from the Corinthians, rebaptized it. This rebaptism was not a mere question of name, but involved a new use under an altered and broader religious ideal more or less democratic. To designate a building used in this way by a community, we have the sacral term *οἶκος* as employed consistently in Delian inventories.³⁸ The Delian *θησαυρός* was, as we have seen, a money-box pure and simple, *οἶκος* being the invariable term for a communal house. If now we turn to Aristotle's *Politics*, we find him using the word *οἶκος* in just the sense of the Delian inscriptions. He gives, in sketching the progress of democracy as a counsel of democratic policy made perfect, the multiplication of tribes and phratries and the collecting together of many private *sacra* into a few private centres, which he calls *οἶκοι*.³⁹ Precisely what Aristotle had in mind may, I conceive, be gathered from an inscription⁴⁰ which Michel dates about 300 B.C.⁴¹ It was found on a slab of bluish marble built into a house in Chios, and relates to the affairs of the Chian *φρατρία* of the Clytidae. Originally aristocratic

³⁸ Hesychius, confusing together the meanings of both words, yet vaguely recognizes the Delian sacral term *οἶκος* = *θησαυρός* where he says: *θησαυρός*: εἰς ἀγαλμάτων καὶ χρημάτων ἢ ἱερῶν ἀπόθεσιν οἶκος.

³⁹ VI, p. 1319b 11. 19 ff.: *φυλαί τε γὰρ ἕτερα: ποιηταί πλείους καὶ φρατρίαι, καὶ τὰ τῶν*

ιδίῳ ἱερῶν συνακτέον εἰς ὀλίγα καὶ κοινά.

⁴⁰ Ditt. 571, Michel, *Recueil d'Inscriptions Grecques*, 997.

⁴¹ Dittenberger describes its characters as: 'Litterae vulgares dispositae στοιχηδόν,' while Michel places the inscription towards the end of the fourth century, B.C.

only, this phratry enrolled humbler members who finally rebelled against the customary housing of the *ιερὰ* in the *οἰκίαι* or private dwellings of certain members. This inscription provides by decree for building a *consecrated communal house in the precinct of the Clytids* (*οἶκον τεμένιον*) and for the transference thither of the common *ιερὰ* from private dwellings.⁴² A clause reciting the religious grounds of this decision then follows: 'Whereas sacrifices made have proved favourable to building and to the transference of the common *sacra* to the communal house.' Then follows a recital of the sacrifice: 'The Clytidae voted [on a given day] to sacrifice as to whether their *sacra*, now in private houses, must be transferred to the communal house which they have built in obedience to prophetic command *simply as heretofore on the day of the sacrifice*; or whether they must be permanently deposited in the communal house,—and the sacrifice pronounced in favour of the latter course.' Then follows a mandatory decree requiring surrender, sanctioned by a fine of 1,000 drachmas forfeited to Zeus Patroos, and by legal excommunication, ending with provision for a record on a *stela* to be placed at the entrance of the new *οἶκος*.

Although the term *θησαυρός*, surviving from the time of Cypselus, prevailed at Delphi, M. Homolle's inscription from the Delphian treasury of the Athenians⁴³ implies recognition even at Delphi of the inconvenience practically resulting from ambiguity in the use of the current Delphian term. The same recourse to *οἶκος* for Delphian treasuries appears in the Plutarchian *De Pythiac Oraculis*,⁴⁴ where the well-worn theme of the curse of Moline and the exclusion of the Eleans from the Isthmian games is taken up controversially in connexion with the episode of the rebaptizing of the treasury of Cypselus to suit the Corinthians. This drawn battle of the antiquarians of antiquity shews incidentally in the Plutarchian text that the professional Delphian guides found the term *οἶκος* less confusing for their own very practical proceedings than the popularly current term *θησαυρός*. It serves also to bring out what a large place in the popular imagination was filled by tales of the munificence of Cypselus at Delphi and Olympia. Above all it furnishes new evidence tending to shew that such currency as the term *οἶκος* = *θησαυρός* eventually gained at Delphi has to do with a very real alteration in the status of all treasuries so-called. These under a democratic dispensation throughout Hellas became communal houses in which each member of the founding community had his share, at least sentimentally, and really, if ever he appeared at Delphi or Olympia.

The characteristically Olympian term *ναός* = *θησαυρός* = *οἶκος* remains to be finally considered. A certain, although a limited currency for it is

⁴² [ἐν τῷ] τεμένει [τῶν Κλυτιδῶν] οἶκον τεμένιον ἱερὸν οἶκο]δομήσασθαι καὶ τὰ ἱερὰ τὰ κοινὰ [ἐκ] τῶν ἰδιωτικῶν οἶκων εἰς τὸν κοινὸν οἶκον ἐνεγκεῖν.

⁴³ *B.C.H.* xvii (1893), p. 612, The words *οἶκος* 'Αθηναίων are cited as occurring in an Athenian decree inscribed upon the treasury. Another

decree is cited where occur the words *θησαυρός πόλεως*.

⁴⁴ Cc. XII, XIII, and XIV *init.* But note that in the middle of c. XIV Philinus reverts to the term *θησαυρός* for the same 'treasury' of the Corinthians, which everywhere else in the dialogue is called the *οἶκος Κορινθίων*.

vouched for not only by Strabo's term *ναῖσκοι*, already enlarged upon, but also by Pliny's use of the Latin equivalent of *ναός* (*aedes*) for *θησαυρός* in a passage to be discussed anon. But the great authority for its use at Olympia is Polemo as circumstantially quoted by Athenaeus. Note that the Delian inventories could not, if only for the sake of clearness, use this Olympian term *ναός*. For along with the contents of their *οἶκοι*, they register those of at least three temples (*ναοί*), (*a*) the Artemision, (*b*) the temple of Apollo, and (*c*) the temple of the seven statues (*νεὸς οὗ τὰ ἑπτὰ*). Even as it is, there is some confusion in the inventories between temples and communal houses at Delos. That Polemo, an acknowledged expert in regard to treasures,⁴⁵ regarded *ναός* as an especially Olympian term seems likely from his using *θησαυρός* of the *Delphian* house of the Spinatai in a passage already discussed, whereas he speaks of the Metapontines' and the Byzantines' *Olympian* treasures as *ναός Μεταποντίνων* and *ναός Βυζαντίνων*.⁴⁶ That he uses just this and no other term quite advisedly on this occasion is shewn by the end of the very passage in question. After a list of notable things stored in the 'temple' of the Metapontines, followed by a similar list for the Olympian 'temple' of the Byzantines, Polemo's final clause begins: *ἐν δὲ τῷ ναῷ τῆς Ἡρας τῷ παλαιῷ*. The Heraeum, that is, and the treasures east of it, are all designated by the term *ναός*.

Dismiss now the further discussion of various names for communal houses, and glance at the information as to what the communal houses contained to be derived from the passage just considered. Polemo mentions nothing in the Metapontines' *ναός* except a number of silver vessels such as would be in use for the ceremonial observances at Olympia in which Metapontine theors as such would inevitably take part. The same is true of the Byzantine inventory that follows. Some weight may, I think, attach to the fact that this quotation is given as continuous. Although Athenaeus introduces it in a discussion of queer-shaped cups and would have cut out the mention of other things had many such been there, no such curtailment has apparently been necessary. One notable item in the Heraeum is the golden *κρατήρ* characterized as *Κυρηναίων ἀνάθημα*. Why was this not deposited in the Cyrenaeans' house on the terrace near by? From this and other evidence the suspicion arises that, apart from such silver plate as was necessary for ritual purposes, local gifts of especial value would be stored in the Heraeum,—a far safer place and a surer treasury than any one of the eleven communal houses on the whole terrace. It is indeed easy to overstate the local character of the local treasures. Herodotus⁴⁷ speaks of six golden mixing bowls (*κρητῆρες*) dedicated by Gyges at Delphi, and stored in the 'treasury' of the Corinthians, where was also the magnificent censer dedicated by Euclithon of Cypriote Salamis. He relates that the bricks of

⁴⁵ Plutarch, *Symposiac*. V ii: τοῖς δὲ Πολέμωνος τοῦ Ἀθηναίου περὶ τῶν ἐν Δελφοῖς θησαυρῶν οἶμαι ὅτι πολλοῖς ὑμῶν ἐντυγχάνειν ἐπιμελές ἐστι, καὶ χρὴ πολυμαθοῦς καὶ οὐ νυστάζοντος ἐν τοῖς Ἑλληνικοῖς πράγμασιν ἀνδρός.

⁴⁶ See Athenaeus 480a; the whole passage comes apparently from the *Ἑλλαδικὸς λόγος*, regarded by some as an epitome of a more extended work of Polemo.

⁴⁷ i 14 and 50; iv 162.

gold sent by Croesus were stored in the cella of Apollo's temple. When the cella was burned, the golden lion that had stood on these bricks being damaged was stored in the Corinthians' treasury near by, but apparently the gold bricks were not put there. Pausanias mentions a box-wood statue of Apollo overlaid with gold,—an offering of the Epizephyrian Locrians, but stored in the Sicyonians' treasury,—and notices that the Eleans have removed the cedar-wood Hesperides executed by Theocles, son of Hegylus, from the Epidamnians' treasury to the Heraeum. Likewise he reports that the Athena from a group in the Megarians' treasury had been removed to the Heraeum. A community having its communal house at Olympia or Delphi did not as a matter of course deposit all its offerings there. Whatever disposal was made at the outset was plainly subject to alteration by the Eleans and the Delphians, on whom rested all responsibility. These facts confirm an impression, already borne out by evidence of other kinds, that the primary importance to a community of its communal house at Olympia or Delphi was as a headquarters and a ritual *rendezvous*,—a place where certain needful utensils⁴⁸ were stored in readiness for use⁴⁹ by the official delegates. Not every *ἀρχιθέωρος* could command Nicias' wealth,⁵⁰ nor could Athens even depend always upon having a spendthrift Alcibiades, determined to win power by magnificence at Olympia or Delphi.⁵¹

All these conclusions are circumstantially confirmed by the Delian inventories. The contents of the *Ἀνδρίων οἶκος* are there inventoried during a series of years. Under Charilas (B.C. 269) it is a storehouse simply, containing *δεσμούς μεγάλους . . . ὀβελίσκους χαλκοῦς . . . ἄσφαλτον*. In the earlier inventory of Sosisthenes (279 B.C.) it is not mentioned. In B.C. 250 it contains much plate, the list of which is followed by mention of timber.⁵² In 180 B.C. ivory and an accumulation of tin labels appear along with plate.⁵³ The Andrians' house may have been built at the time of the revival of the Delia in B.C. 476, possibly earlier, and can hardly have stood empty until the *ἱεροποιοί* used it as a storehouse and deposited plate there. We may then surmise that it always contained the plate and other ritual appurtenances of the Andrians, for which possibly the *ἱεροποιοί* were not accountable, and which they, therefore, do not mention. Among the pieces

⁴⁸ Lest it be maintained that articles of plate, once dedicated within the precincts, were invariably regarded as withdrawn from further use, consider the loan made to the Segestans of *φιάλας τε καὶ οἰνοχόας* from the temple of Aphrodite at Eryx, Th. vi 46, 3.

⁴⁹ Such sacred vessels abounded in the Parthenon, but those for deputations abroad were probably kept in the *Pompeium* (Paus. I ii, 4) *οικοδόμημα ἐς παρασκευὴν τῶν πομπῶν*,—words which might apply to any one of the Olympian or Delphian treasuries. It seems not unlikely that Olympian delegates from the 'home counties' (Arcadia and Elis) would find similar vessels stored for their use in the Olym-

pian Prytaneium, unless they simply brought them along from home. In any case it is a striking fact that there is no trace or record of such a thing at Olympia as an Arcadian treasury of any denomination.

⁵⁰ Plutarch, *Nicias* iii.

⁵¹ *Οἱ γὰρ Ἕλληνες καὶ ὑπὲρ δύναμιν μείζω ἡμῶν τὴν πόλιν ἐνόμισαν τῷ ἐμῷ διαπρεπεῖ τῆς Ὀλυμπίας θεωρίας*, Th. vi 16, 2.

⁵² *ξύλα δρύινα, κέδρινα, πετελίνα*.

⁵³ *ἐβένου δλκὴ μναὶ ΔΔΔΔΠΙΙΙ . . . ἐλέφαντος μναὶ ΔΔΔΙΙ . . . ἐλέφαντος σκυτάλαι ΔΠΙΙ . κασσιτέρου σκυτάλαι*. Inventory of Demades, ll. 165–170.

of silver plate which they do specify, sometimes giving the donor's name, certainly not one⁵⁴ is attributed to an Andrian donor.⁵⁵ The intricate history of the *νεὸς οὗ τὰ ἐπτὰ*, and the existence under Athenian management of a communal house at Delos for the Delians, certainly favour the view that some foothold upon the sacred precinct, some home-plot or building, was very convenient and almost essential for those called upon to perform, in the name of a community, definite ritual acts. Thus the conclusion is justified that the communal houses at Olympia and elsewhere lost in a great measure their characteristic function as *θησαυροφυλάκια* when they became communal houses, instead of belonging to individual magnates like Cypselus and Myron. Then they ceased to house anything that might more safely be kept elsewhere, and their only constant store consisted of ritual appurtenances, chiefly plate, needed for use by their local theors. This transformation in their normal use tended to accentuate the points which they had in common with temples, points somewhat insistently dwelt upon in this account.

Just here may rightly be discussed the reasons for thinking that the so-called *Lesche of the Cnidians* at Delphi was a treasury, the treasury of the Cnidians mentioned, but not located, except by negative implication, in Pausanias. This author clearly locates the Sicyonians' treasury (X xi 1), now recognized as represented by foundations just adjoining and below the debatable site. He then names Cnidian statues, and says that the Siphnians also built a treasury (X xi 2) for reasons which he analyses. Next he mentions Liparacan statues, and digresses into some account of the Liparaeans as colonists from Cnidus (X xi 3-4). After this comes his mention of the Thebans' and the Athenians' treasuries, coupled with an analysis of their respective motives in founding, and of the sources from which the required moneys were derived. After this, and nowhere before, the treasury of the Cnidians occurs to our author, who says he is at a loss to make out whether the Cnidians founded it to glorify some victory, or from a desire to make a

⁵⁴ Asclepiades of Chios figures twice with the *πόλις τῶν Κφών*, Antipater of Cyrene, Timocrates, son of Antigonus, Antigonus and Stratonice, as well as one Medeias, *τῶν ἐν νήσου*. If the community of Cos could have its *φιάλαι* stored in the Andrians' house, why not the Andrians?

⁵⁵ See M. Homolle *Comptes des Hiéropes Déliens* (B.C.H. 1882). Offerings were put on the same footing with other treasury assets,—this might account for the absence of any mention of hypothetical Andrian plate which would not appropriately figure as offerings, since it was stored for use by the Andrians,—and accounted for by the *ieroποιοί* as bestowed (A) in the temple of Apollo (*Δηλίων νεὸς* or *οἶκος*), and (B) in other buildings sometimes fewer, but never more than four in number:

(a) the *νεὸς οὗ τὰ ἐπτὰ* ('*Ἀθηναίων νεὸς*), (b) the Artemision, (c) the *χαλκοθήκη*, (d) the temple of Eilithyia. The *Δηλίων οἶκος* and the *Ναξίων οἶκος* figure on the inventories as mere storehouses. This need not however have interfered with their use by the home deputations at the time of the festival. Considering that the Athenians came in 478 B.C., not as politically supreme, but as Amphictyons, and preempted the *ναὺς οὗ τὰ ἐπτὰ* (which they re-named the '*Ἀθηναίων νεὸς*') for their yearly offerings, an anomalous position in their own home-sanctuary was created for the Delians. This is no doubt indicated by the mention in inscriptions of the *Δηλίων οἶκος*, used by the Delians for a *Pompeium*, but only, be it remarked, while the Athenians had charge of the sanctuary.

show.⁵⁶ If the rule applied with success at Olympia is strictly followed,—if that is we take the order in which Pausanias mentions these treasures to be the order in which he or any visitor would come upon them, then the Cnidians' treasury must be higher up, and that of the Siphnians lower down than the Thebans' and the Athenians'. This forces us to assign the remains next above the Sicyonian foundations to the Siphnians' treasury, for the gorgeousness of which, as vouched for by Herodotus, there is indeed no site left, if we disregard our well-tested rule, and oust the Siphnians to make room for the Cnidians out of their turn. Moreover, everything about the treasury belonging to these debatable foundations, as restored, speaks of Ionic, not of Doric taste and style, while the Cnidians were Dorians. But now the question arises: Where according to our rule for interpreting Pausanias can the Cnidians' treasury have been? Immediately above the Thebans' and the Athenians' treasures unquestionably. Unfortunately there is no space available, for the temple of Apollo immediately adjoins them on the north, and foundations older than the Cnidians' treasury can have been occupy the other side,—the side where is the Theban treasury,—of the sacred way. Indeed this side is for the most part too precipitous to allow of the founding of any building there. Above, and east of the temple of Apollo, lies the so-called Lesche of the Cnidians, answering fully, if any building of antiquity did, to Pausanias' notion of a fabric reared ἐς ἐπίδειξιν. It was, in fact, from the moment of its erection the show building of the whole Delphian precinct.

Now in what terms does Pausanias name this building whose current name of Lesche, as understood by Mr. Frazer to mean a 'Club-house,' covers the notion of the communal house (θησαυρός) as a *rendezvous* with such fatal completeness as to exclude the equally essential idea that a treasury was a temple of some sort? Pausanias does not call it a Lesche (λέσχη), but mentions it as οἶκημα γραφὰς ἔχον τῶν Πολυγνώτου, ἀνάθημα μὲν Κνιδίων (X xxv 1). What can be the nature of a chamber thus formally consecrated within his precinct to Apollo? Must it not be a θησαυρός, i.e. not a club-house or rendezvous only but also a temple in some sort? The sense attaching to the word οἶκημα in a justly celebrated passage of the eighth Book of Herodotus⁵⁷ certainly forces this meaning upon οἶκημα when we find ἀνάθημα in apposition with it and know that the fabric thus described was within the sacred precincts of Delphian Apollo. Such a consecrated chamber would be only the more appropriately used as a ἱερὸς οἶκος or a τεμένιος οἶκος for the assembly of members of the community dedicating it, if like the one in hand it was adorned with the most perfect paintings of Polygnotus.

So far had my argument progressed in the attempt to identify the

⁵⁶ X ix 5: οἱ δὲ θησαυροὶ Θηβαίων ἀπὸ ἔργου τῶν ἐς πόλεμον καὶ Ἀθηναίων ὡσαύτως: Κνιδίους δὲ οὐκ οἶδα εἰ ἐπὶ νίκη τινι ἢ εἰς ἐπίδειξιν ψκοδομήσαντο.

⁵⁷ It occurs in the solemn message entrusted by the Athenians to Alexander for delivery to

Mardonius (viii 144): first among πολλὰ καὶ μεγάλα διακωλύοντα standing between Athenians and adhesion to Persia,—even supposing them eager for it,—are τῶν θεῶν τὰ ἀγάλματα καὶ τὰ οἰκήματα ἐμπερησμένα τε καὶ συγκεχωσμένα.

so-called Lesche of the Cnidian with the treasury of the Cnidian, when I chanced to turn up in Harpocration the well-known account of Polygnotus, consisting of a quotation from Lycurgus ἐν τῷ περὶ τῆς ἱερείας. There I was astonished to observe that in the story of how Polygnotus obtained Athenian citizenship 'because he painted for nothing the Stoa Poikile,' or, 'as others have it, the pictures ἐν τῷ θησαυρῷ καὶ ἐν τῷ ἀνακείῳ,' all editors and commentators agree,—with no shadow of MS. authority to support them,—in rejecting the MS. reading θησαυρῷ and in substituting either ἐν τῷ Θησείῳ or ἐν τῷ Θησέως ἱερῷ. But this emendation, irrespective of any views about the Lesche at Delphi, has awkward results to which Brunn and others have not given heed. Indeed they seem pleased to give Polygnotus credit for work in the Theseum categorically attributed by Pausanias to Micon and Micon alone. They are also called upon to explain away or circumvent the following words used by Pliny of Polygnotus: *hic et Delphis aedem pinxit* (xxxv 35). Mr. Frazer however is too straightforward to undertake this, and the same is true of Miss Sellers (Mrs. Strong) in her commentary on Pliny. 'Pliny,' says Mr. Frazer, 'mentions the paintings of Polygnotus at Delphi, but seems to suppose they were in a temple.'⁵⁸ On the other hand, Witschl says of Polygnotus' paintings in the Lesche: 'At Delphi where, as above supposed' (in a preceding account of Polygnotus' paintings in the Lesche) 'he did his first work,'⁵⁹ Polygnotus also painted the temple⁶⁰ upon which Aristoclide also did some work.'⁶¹ But Pliny, having said (xxxv 31) that Aristoclide frescoed the temple of Apollo at Delphi, cannot conceivably have meant the same frescoes in the same temple, when he goes on to say (xxxv 35) that Polygnotus painted a temple at Delphi. He can only have been using *aedem* in the sense in which Pausanias uses οἶκημα, ἀνάθημα τῶν Κνιδίων to designate the communal house or treasury commonly called the Lesche at Delphi. Thus it appears that the unassisted labours of Micon in the Athenian Theseum are credited to Polygnotus, whom we must suppose Micon merely to have assisted, solely because we cannot allow Lycurgus to have spoken of the paintings at Delphi by Polygnotus as he did, when he said they were ἐν τῷ θησαυρῷ.⁶² The Lesche 'of the Cnidian' must not be confused,

⁵⁸ Frazer's *Pausanias* V, p. 350.

⁵⁹ In Pauly's *Real-Encyclopaedie* (1848), s.v. Polygnotus.

⁶⁰ Witschl here refers to Pliny xxxv 35: *Hic et Delphis aedem pinxit*, the allusion being to the paintings of Polygnotus in the Cnidian's treasury, nicknamed Lesche.

⁶¹ Witschl here cites Pliny xxxv 31: Aristoclide qui pinxit aedem Apollinis Delphis, the allusion being to the main temple at Delphi.

⁶² Lycurgus, as quoted by Harpocration, evidently gathers up, without sifting them, two conflicting rumours explaining why Athenian citizenship was conferred on Polygnotus: (a) ἐπεὶ τὴν Ποικίλην στοὰν (the Stoa Eleutherios, see Gardner's *Athens* pp. 389 f.) ἔγραψε προῖκα,

(b) ὡς ἕτεροι, τὰς ἐν τῷ θησαυρῷ (the Delphian 'Lesche') καὶ τῷ ἀνακείῳ (the temple of the Dioscuri, Gardner's *Athens* pp. 97 and 393). Even these ἕτεροι, who were doubtless muddle-headed gossips, were dimly conscious that painting *gratis* for the Cnidian would hardly earn the gift of citizenship from the Athenians, and threw in the paintings in the temple of the Dioscuri at Athens, working Polygnotus rather hard even for such a high honour. Or again they may merely have mentioned the Delphian 'Lesche' by an incoherent trick of short-hand speech, as the place where Polygnotus won his spurs,—the reputation on the strength of which he got the chance of painting the temple of the Dioscuri.

that is, with a treasury; rather than do this we must deprive the Siphnians of their treasury, giving it to the Cnidians who are thus endowed with a treasury and a Lesche as well at Delphi,—an unparalleled instance of liberality and piety for a people of such comparatively secondary importance and resources. Again, although nothing could be simpler and more straightforward than Pliny's statement that Aristoclide painted the temple of Apollo at Delphi, while Polygnotus painted a temple at Delphi,—using here *aedes* of the Cnidians' Delphic treasury just as Polemo uses *ναός* of the Metapontines' and the Byzantines' Olympian treasuries,—Witschl insists that the two places decorated (the *aedem* and the *aedem Apollinis*) are one and the same. This is indeed applying in Polygnotus' favour the principle that to him that hath shall be given and from him that hath not shall be taken away even that which he hath: for Micon and Aristoclide⁶³ are each deprived of the credit for their only unassisted work, of which mention has been preserved. Such a proceeding is plainly inadmissible, and therefore there is no choice but to respect the texts that have come down to us both in Pliny and in Harpocration. The sole recorded work of Polygnotus at Delphi was done in the treasury *par excellence*, namely the Lesche of the Cnidians so called. No other treasury could be so designated when painting was the theme in hand, for the Lesche is *the treasury* adorned with paintings; we know of no other. But this treasury, like all its mates, was a consecrated building so near in its use and estimation to a temple that Pliny only used a designation current among careful writers of Greek, when he called it a temple.

I have left until now the last clause (the *δέ* clause) in Pausanias' general account of the Cnidians' consecrated chamber. He characterizes the chamber as *ἀνάθημα μὲν Κνιδίων*, but proceeds to say by way of antithesis, *καλεῖται δὲ ὑπὸ Δελφῶν Λέσχη*. According to him then it was *not the Lesche of the Cnidians, but the Lesche of the Delphians*. Moreover, he plainly regards this Delphian nickname of Lesche as requiring explanation and even extenuation in view of the sacredness of the fabric, for he immediately gives, as an attenuating circumstance, the Delphians' reason. They called it Lesche because from of old they met there and discussed not only solemn questions of moment, but also all sorts of mythological niceties.⁶⁴ For the full meaning of Pausanias' explanation however we have fortunately neither far to seek, nor are we dependent upon imaginative conjecture. Just such a Delphian holiday of talk about matters serious and more especially concerning all manner of mythological inventions is held in the Delphians' Lesche,—the Cnidians' communal house—by the interlocutors in Plutarch's *De Defectu Oraculorum*. Let me then close by offering the stage setting of this masterpiece of latter-day Hellenic literature as the fullest justification alike of my contention that the Lesche of the Cnidians

⁶³ It is noticeable that Brunn, who does not commit himself expressly to Witschl's wresting of Pliny's words in favour of Polygnotus, nevertheless suppresses all mention of the paintings by Aristoclide in the temple of

Apollo at Delphi.

⁶⁴ X xxxv 1: ὅτι ἐνταῦθα συνιόντες τὸ ἀρχαῖον τὰ τε σπουδαιότερα διελέγοντο καὶ ὕποστα μυσθῶδη.

is another name for the Cnidians' treasury at Delphi, and of the definition of a treasury as a holy meeting-place or headquarters for those occupied with ritual service,—a sort of temple.

In the year 83 A.D., and on the eve of the Pythian festival, Lamprias and his company at the entrance of the Delphian precinct stumble on a meeting,—likened to that of the fabulous birds on the *ὀμφαλός*,—between Demetrius from Britain, and Cleombrotus from the shrine of Zeus Ammon. These two join Lamprias and his friends, and all walk in a body up the sacred way talking as they go. In the desultory course of talk, Lamprias asks Cleombrotus of the oracle he has just visited. Was it also silenced, or did it still give answers? Cleombrotus hesitates, and Demetrius helps him out by raising the general question about all oracles, especially about Boeotian oracles. Meanwhile, journeying up the sacred way, they had reached the portals of the *Lesche of the Cnidians*, which they entered. Friends were sitting there rather bored and sleepy, and Demetrius said: 'You had better be glad to see us, glad too of our subject of talk stumbled upon by the way. *It is appropriate to this place*, and in fact concerns everybody, since it involves the god. So do not begin with wry faces or give way to contentiousness.' So saying, he and his friends found seats, and he gave them all the question about the oracles. Up started then Didymus the Cynic, in high dudgeon against shameless ways of wicked men, who abused oracles parading the badness of their hearts in guilty questions. 'No wonder oracles are dumb,' he cried, banging his stick twice or thrice upon the floor, 'the wonder is they have ever spoken.' He was going on, but Heracleon plucked at his gown, and Lamprias, being a particular friend, expostulated: '*Do observe the festival truce, keep the peace with your enemy Human Depravity.*' Didymus said not another word but walked straight out and away.

Ammonius, shocked by this episode, criticized Didymus and his logic, adding optimistically that more Greeks in the past had required more oracles. Quite enough were left for a sadly diminished population. Dissent followed, and talk of providence and how to use oracles aright. Heracleon, who had been the foremost in suppressing the departed cynic, finally said, addressing Philip *à propos* of Cleombrotus' ingenious notion that not gods but *δαίμονες* had charge of oracles: '*Philip, now that we are well rid of profane and uninitiated fellows and their crude notions about the gods, let us walk warily and not be let in by the discussion for silly and exorbitant admissions.*' Cleombrotus opened his eyes at this, and pulling himself together told the tale he had heard from Aemilianus, who was neither silly nor exorbitant, but the son of his old schoolmaster,—the wonderful tale of a voice sounding at eventide over the sea and bidding men in a passing ship to bear on the tidings that the Great Pan was dead. Demetrius in his turn now rose to the level of due seriousness with his tale of mysterious islands full of ghosts. But Cleombrotus inclines to quiz, and invents a wise man from the far east who has informed him that the gods are departed to other worlds, of which there are many.

Heraclion, consistently serious, demurs, and Cleombrotus is gently snubbed. Demetrius then declares that they have had quite enough of *μῦθοι*. Accordingly, Chapters xxxiv–xxxvii, which follow, soar into abstruse mathematical discussions of the plurality of worlds. The original argument is then resumed, and Lamprias is pressed for his recent experiences at Lebadeia. ‘*You have hearers who are at leisure,*’ says Ammonius, ‘*anxious to track down the truth and eager for light. No breath of jealousy or contentiousness stirs among us, we are tolerant you see and sympathetic; pray then let us hear you.*’ Then follows a final justification of oracles with an explanation of their latter-day silence, which expands into a wider theme,—the opposition between religion and science. This last topic is however approached by means of an illustration from the painter’s art, which causes the whole assembly to turn attentive eyes to the paintings of Polygnotus by which they were surrounded. Thus definitively does the writer of the dialogue contrive at its end, as when it began, to advertise to his readers the fact that the speakers were in a temple and within a sacred precinct. The temple was the consecrated chamber or communal house dedicated by the Cnidians—the Cnidians’ treasury at Delphi.

LOUIS DYER.

THE TWO LABYRINTHS.

[PLATE XIV.]

φασὶ δέ τινες καὶ τὸν Δαίδαλον εἰς Αἴγυπτον παραβαλόντα, καὶ θαυμάσαντα τὴν ἐν τοῖς ἔργοις τέχνην, κατασκευάσαι τῷ βασιλεύοντι τῆς Κρήτης Μίνωι λαβύρινθον ὅμοιον τῷ κατ' Αἴγυπτον.

DIOD. SIC. i. 61.

PERHAPS the most salient feature of the recent development of knowledge in regard to prehistoric Greece is the peculiar connexion which has been shewn (chiefly by the discoveries of Dr. Arthur Evans) to have existed between the oldest Greek culture and the ancient civilization of Egypt. As far back as the time of the Hyksos and the XIIth Dynasty the connexion is certain. We now know that during the XVIIIth Dynasty (seventeenth to fifteenth century B.C.) Egypt maintained regular relations with the Cretan Mycenaeans of the great period of Knossos and Phaistos: the 'Late Minoan' period of Evans. This much the incontrovertible evidence of the Egyptian tomb-paintings at Thebes has told us, to say nothing of the numerous pieces of minor evidence from both Greece and Egypt. The corroborative evidence of the alabastron-lid of the Hyksos king Khian, and the figure of the Egyptian Abnub (who certainly lived during the Hyksos period), which have been found at Knossos, take us two centuries or more further back; and the remarkable parallels between the Cretan seal-designs and the Egyptian scarab-designs of the XIIIth Dynasty, which Dr. Evans was the first to point out, shew us that the connexion was older than the days of the Hyksos. The Egyptological literary evidence on the subject indicates that the Egyptians had dealings (often of an unfriendly kind) with the seafaring peoples of the Mediterranean certainly as early as the XIIth Dynasty (Middle Kingdom), possibly as early as the VIth. But now we are pursuing the voyage of discovery into remote and little known seas, so that progress must be slow and cautious, and careful soundings must constantly be taken. The Egyptian literary evidence of knowledge of the Northerners (*Ha-nebu*) under the Old Kingdom (up to about the twenty-fifth century B.C.) is of the scantiest and vaguest character, and can be made to mean almost anything the investigator wishes. The archaeological evidence is also very scanty, but, such as it is, it must be said that it is not vague, and that such



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EGYPTIAN AND CRETAN SQUARE PILLARS.

bits of evidence as the finding of a very primitive Egyptian stone vase and a fragment of a IIIrd-IVth Dynasty diorite bowl at Knossos and the remarkable analogy of the light-blue Knossian glazed faïence to the similar faïence of the earliest Egyptian dynasties,¹ make it impossible to deny off-hand that any connexion between Greece and Egypt existed before the XIIth Dynasty. For the XIIth Dynasty it is certain, however we may square the apparent contemporaneity of the primitive Amorgian cist-grave period in *Crete* and the XIIth Dynasty² with the equally apparent contemporaneity of the 'Middle Minoan' (Kamáres) period in the same island with the same dynasty.³ For the earlier period the evidence of the faïence is striking. In Egypt the light-blue faïence is characteristic only of the early dynasties, and of the XXVIth, the Saïte age of the seventh to sixth centuries B.C., whose potters archaized in this matter of glaze just as their sculptors archaized in the style of their reliefs. In *Crete* it is characteristic of the early Minoan period. This is certainly, when taken in conjunction with the other evidence, in favour of the contention that the connexion between *Crete* and Egypt went back further than the time of the XIIth Dynasty. Of course the preference for the light-blue glaze may have lasted in *Crete* when it had died out in Egypt; but the diorite fragment and the primitive vase from Knossos, which were imported Egyptian objects, not copies of Egyptian technique, are witnesses for a connexion under the earliest dynasties. It cannot be maintained that these two objects were imported a thousand years after the time of their manufacture. The ancients did not collect antique 'curios,' at any rate not till the time of the Saïtes in Egypt, and the Romans in Europe. It cannot be conceived that to a Keftian of the time of the XVIIIth Dynasty Egyptian objects of the days of the Third and Fourth Dynasties would have been of the slightest interest, any more than they would have been to an Egyptian of the same period. Dr. Evans and Prof. Petrie also connect

¹ See Evans, *B.S.A.* ix. p. 62 f.

² Evans, *Pictographs*, p. 105 ff. These Agios Onouphrios scarabs cannot be earlier than the XIIth Dynasty. If they are not XIIth Dynasty, they can only be early XVIIIth. And this would agree still less with the probable date of objects with which they were found. We can hardly assume that not merely in the islands, but in *Crete* itself, and within a stone's throw of Phaistos, there existed at the same time as the fully developed Minoan civilization a tribe which retained the culture of the sub-Neolithic period.

³ Petrie, *Illahun*, Pl. I. Dr. Mackenzie says (*Phylakopí*, p. 261) that the polychrome (Kamáres) ware from *Crete* found in Egypt is 'assigned by Flinders Petrie in view of all the evidence to about 2500 B.C.' In view of the evidence from *Crete* it is true that the contemporaneity of the Kamáres ware found at

'Kahun' with the XIIth Dynasty town of Het-hetep-Sensret seems extremely probable, but when the polychrome fragments were found their discoverer was by no means convinced of their early date. On p. 43 of *Kahun* he says: 'As they (the fragments of foreign pottery found at Kahun) were none of them on the floors of the chambers, or in unequivocally early positions, they may be later intrusions and dropped by chance passers, and some are almost certainly late.' Cf. also p. 31. It was in view of this uncertainty expressed by Prof. Petrie that four years ago I classed the Kahun evidence as weak (*Oldest Civilization*, p. 67). But our present certainty that the polychrome ware was in use in *Crete* at a date long anterior to the Great Palace period (Third Phylakopí), which was contemporary with the XVIIIth Dynasty, shews that Prof. Petrie's doubts were probably not justified.

certain bowls and vases of black pottery found at Abydos and dating to an even more remote period (Dyns. I.-II.) with the late Neolithic black pottery of Knossos⁴; but here we seem to be dealing with stuff less markedly characterized than light-blue glazed pottery, and the stone bowls and vases of the Old Kingdom, which are unmistakable. Prof. Petrie further maintained⁵ that in the boats depicted upon the Egyptian vases of the praedynastic period we ought to see the actual sea-going galleys in which the primeval commerce of the Mediterranean was carried from Egypt to Greece and *vice versâ*, but it must be said that this conclusion is by no means probable or in the least justified by the appearance of the boats in question: they are quite evidently but ordinary Nile-boats, the praehistoric ancestors of the dahabiyas and felukas of to-day. They have deck-shelters just like the model funerary boats of the Middle Kingdom tombs, and they carry women on board, and on one vase a woman is depicted wailing, with her hands above her head: it may well be that they actually represent the ferry-boats of the dead. They carry purely Egyptian emblems. Now we know of the Egyptians that they were never seafarers: they disliked the sea, and they held the seafaring inhabitants of the Delta-coast in abomination; it was never the Egyptians who went to Crete in the early days or later. Just as the Milesians came to the Nile-mouths in the eighth century, so the Keftians had come to Egypt in the sixteenth, and the Ha-nebu in the old time before them; but as far as we know, no Egyptian ever returned the compliment, unless driven from the Palestinian coast by stress of wind and waves.⁶ So that if we ever find Egyptian representations of the ships that took the stone vases of the early dynasties to Crete we shall see that they were neither Egyptian nor carried Egyptian emblems. And as for the oars of the praehistoric boats, the Nile-boats had many oars. Finally, these boats are represented amid ostriches, oryxes, mountains, and palm-trees: that is to say they are sailing on the Nile, with the desert-hills and their denizens on either hand.

But, although we do not know what the ships were like in which this early commerce between Egypt and Europe was carried on, we have enough evidence to shew that this commerce had existed for centuries before the 'Palace' period in Crete, when the Keftians brought gifts to the court of Hatshepsu and Thothmes III at Thebes. When Dr. Evans publishes Knossos in full we shall find all this evidence marshalled in order, and with the distinction fully marked between the evidence which points to a mere general sea-connexion and culture-exchange between Egypt and Crete, and that which seems to indicate something more, possibly an ultimate common origin for the Egyptian and Aegean civilizations. Meanwhile, further corroborative evidence may be sought, and one point which seems to bring certain

⁴ Petrie, *Abydos* ii. p. 38.

⁵ *Egypt and Early Europe* (Trans. R. Soc. Lit. xix. p. 61).

⁶ Like Uenuamen, the Egyptian envoy to Phoenicia in the eleventh century (*Oldest*

Civilization, p. 321). But he was cast away on Cyprus only and the ship he sailed in was Phoenician. There were no Egyptian merchant-ships on the 'Great Green' sea

architectural ideas of the Minoans into connexion with certain similar ideas of the XIIth Dynasty Egyptians may be worth raising.

This point arises in connexion with the probable resemblance of the Egyptian and Cretan Labyrinths. That the great palace discovered and excavated by Dr. Evans at Knossos is the Cretan Labyrinth of the ancients is generally admitted. Generally accepted, also, is Mayer's brilliant suggestion with regard to the word *Λαβύρινθος*, that it is the same as the Carian *Λάβρανδα*, which is probably *λάβρυνς* 'Double Axe,' plus the Asianic termination *-νδα*, which is the same as the Greek *-νθος* (of *Κόρινθος*, for example), claimed by Kretschmer in his epoch-making *Einleitung in die Geschichte der griechischen Sprache* as one proof of the existence of a prae-Aryan and specifically 'kleinasiatisch' element in Greek place-names. In view of the fact of the constant recurrence of the double-axe sign at Knossos, this explanation was adopted by Dr. Evans.⁷ It has commended itself to all except those who dislike the idea of a prae-Aryan population and speech on the sacred 'Aryan' soil of Hellas. To those, however, who have no particular prejudices in favour of the 'Indo-Europeans' or their group of languages, the supposition that the 'Minoan' originators of Greek civilization were not Indo-Europeans, and did not speak any form of the Greek language, but an 'Asianic' idiom akin to those of the Lycians and Carians, seems not only a probability, but a far more interesting probability than the other. The barbarian Scyths, the unintelligent Persians, were pure Aryans. The originators of human culture in Egypt and Mesopotamia were the non-Aryan non-Semitic Nilotes and Sumerians. In India it is possible that a Dravidian civilization existed before the coming of the primitive Aryans, and that the later culture of India was strongly influenced by the traditions of the conquered civilization. We know that the Semitic culture of Mesopotamia was almost wholly of non-Semitic (Sumerian) origin; the conquerors imposed their language on the conquered, but wrote it in the writing which had been invented by the latter. The theory which would regard the Mycenaean culture as of non-Aryan origin, and the later civilization of Greece as a blend of the ideas of the conquered 'Mycenaeans' with those of the conquering Indo-Europeans from the north, who imposed their Aryan language on the conquered, has therefore analogies in its favour. It seems to be rendered necessary by various considerations. The ethnologists⁸ have shewn us that the dark dolichocephalic Mediterranean peoples, whether they be Italians, Greeks, or Egyptians, form a race by themselves, in complexion and skull-form radically differing from the fair brachycephalic 'Alpine' peoples of Central Europe, who have the best right to be regarded as the original speakers of 'Indo-European.' Kretschmer⁹ has pointed out that many Greek place-names are evidence of a language-stratum in Greece which is related to the ancient languages of Caria and Lycia, which he believes to be non-Aryan.

⁷ *Mycenaean Tree and Pillar-Cult* (J.H.S. xvi.) p. 109, n. 6.

⁸ Sergi, *Mediterranean Race*.

⁹ Kretschmer, *op. cit.*

This belief will probably be shared by those philologists who know something of non-Aryan as well as of Aryan tongues. And it agrees with the demands of the ethnologists, who find the main stock of the Greek race dolichocephalic and dark, that is to say, non-Alpine. The tall, fair-complexioned, red-headed people who formed the upper stratum of the old Hellenes, and were probably dying out about the time that the Greek became the 'Graeculus esuriens,' were the Alpine conquerors who imposed their Aryan tongue on the old Mediterranean Greek stock, which has survived them. Further, Greek tradition agrees with this view: the Pelasgi were the Dravidians of Greece as far as their relations with the later conquerors were concerned. The conclusion that they were also the Sumerians of Greece, that the prehistoric civilization of Greece, to which her later Aryanized culture owed so much, was the product of non-Aryan 'Asiatic' Mediterraneans (akin racially to the ancient Egyptians among others), who were probably the 'Pelasgi' of legend, is at least justified by analogy, and agrees with the demands of Sergi and Kretschmer from the view-points of ethnology and philology. The less cultured but more energetic Aryans, coming from the Alpine regions with their iron weapons (as Prof. Ridgeway said), overthrew the ancient civilization of the Mediterraneans, and in the time of barbarism which ensued (dated by archaeological discovery accurately to the twelfth to ninth centuries B.C.), imposed their language on the conquered, but at the same time drank in the knowledge of their more developed culture, with the result that in the eighth century Greek civilization was re-born altered and transformed by the new racial element in the land. It is thus that we see nothing strange in the idea that in the sixteenth century B.C., when the Minoan civilization was at its height, a language was spoken in Greece as different from Aryan Greek as ancient Egyptian was (and quite possibly more akin to the latter than to the former). Nor need we wonder if the Cretan hieroglyphs, when they are read, prove to express a language of the Asiatic non-Aryan type, in no way related to Greek except in so far as words of the old language were adopted into the speech of the Aryan conquerors. Probably there are many such originally non-Aryan words in Greek.¹⁰

¹⁰ In articles in *B.S.A.* viii. p. 125 ff. and x. p. 115 ff. Mr. R. S. Conway supposes that the Eteocretan tongue, as shewn on the 'nomos,' 'barxe,' and 'neikar' inscriptions from Praesos, is Indo-European, and suggests that an Indo-European language was spoken by the Minoans. In effect his article is an apology for Aryanism in respect of the 'Minoans' and so indirectly for the Aryan character of Minoan civilization. This goes against all the archaeological evidence, which gives a non-Aryan impression of the Minoans. Mr. Conway does not believe in Kretschmer's theory that the Asiatic languages were non-Aryan; but at the same time says 'I know nothing about Lycian.' The arguments for the non-Aryan character of

the prae-Hellenic language-stratum in Greece (the existence of this Mr. Conway fully admits) rest chiefly on the apparently non-Aryan character of Lycian (in conjunction with the ethnological evidence), yet their critic admits that he knows nothing about that language. On his pp. 154, 155 Mr. Conway does not disprove Kretschmer's theory with regard to the non-Aryan origin of the Greek words in *-νθ(ος)*: he merely says he has 'never been able to see any ground' for accepting it. The only answer is that others have been able to see many grounds for doing so. Mr. Conway notes as a most interesting fact that the *-νθ-* words (other than place-names) such as *ἐλμινς*, *πείρινς*, *βόλυνθος*, *κῆρινθος*, *ὑλινθος*, *ἐρέβινθος*, *περίβιν-*


The word Labyrinth then we may regard with Mayer as a prehistoric form, itself dating from Minoan times, and meaning 'Place of the Double Axe' in the Asianic tongue of the Minoan Cretans; and we may with Dr. Evans regard the Knossian palace, the chief 'Place of the Double Axe' in Crete, as the Cretan Labyrinth.¹¹ Why was the Egyptian Labyrinth

θος, λέβυθος, ἀδάμυθος, ἀψίνθιον, κόρυθος, αἶγυθος, are 'all earthy of the soil; they represent exactly the type of words which come into language from the speech of the countryman, *adscriptus glebae*.' They are, as he says, the words that the Achaean warriors learnt 'from their Mycenaean servants and tenants' after the conquest. But they are for him of Indo-European origin. Were this so, we should expect these words of the peasants to resemble words of the same signification in other Aryan tongues. If Mr. Conway can shew us that they do he will have proved a point in favour of his view. Meanwhile, one may be pardoned for believing that these are examples of non-Aryan words in Greek. *Κήρυθος, ἐρέβινθος, αἶγυθος* may be instances of Indo-European words with the -υθ termination added, though in the case of the two last the Indo-European origin of ἐρέβ- and αἶγ- seems open to question.

¹¹ In *J.H.S.* xxi. (ii.) pp. 268-274 Mr. W. H. D. Rouse makes a vigorous attack on these conclusions. Since (in a footnote to p. 268) he has mentioned me personally as having adopted them, perhaps I may be allowed the license of a somewhat lengthy note in which to comment upon some of his arguments. Vigorous criticisms of this kind are both useful and salutary, but they lose much of their force when they do not take account of all the evidence. (i) Mr. Rouse says that 'no attempt is made to analyse the word Labyrinth, to explain the ending, to explain the metathesis of υ which is unexampled.' This must have been written without due regard to Kretschmer's work, although a reference to it was given by Mr. Evans. Why the metathesis of υ should be important when we are dealing in the case of *λαβύρινθος* with a pre-Hellenic word surviving in Greek, and in the cases of *λάβρυς* and *λάβρανδα* with Carian words more or less imperfectly transcribed in Greek characters in comparatively modern times, is not apparent. The difference is remarkably slight; and those, who from a certain knowledge of Semitic tongues have learnt the true unimportance of vowels in the construction of words, will not be able to see that whether the word is written *λαβύρινθος* or *λαβρύνθος* makes much odds: the important things are the λ-β-ρ and the υθ- or ρδ-, and their collocation in this


particular instance when taken in conjunction with the fact that both at Knossos and at Labraunda the double-axe occurs and is the symbol of a god. (ii) Mr. Rouse does not believe that the double-axe was specially venerated at Knossos or by the Minoans generally. He makes merry over the idea of 'Greeks' venerating a symbol at all: 'the Greeks,' he writes, 'would be as likely to worship a trident or a bunch of grapes as to worship a pair of top-boots; and to regard these things as symbolically sacred would be to worship them. Savages may make a fetish of a collar-stud or a knife, but there is no reason to doubt that such exaggerated superstition was alien to the Greek intellect. Isolated indications of the ruder superstition cannot outweigh the general tendency of Greek worship towards sanity and away from symbolism.' The 'isolated indications' are quite sufficient to give Mr. Rouse's case away. The fact is that there was in Greece as much underlying barbarism as anywhere else: even the 'Aryan' Greeks were savages once. But, apart from this, Mr. Rouse begs the question when he assumes that the Greeks who built Knossos were those idealized paragons who would have turned with graceful loathing from the commission of so unintellectual an act as the veneration of a double-axe as the symbol of the divine power. It seems most probable that the Minoans were not 'Greeks' in Mr. Rouse's sense at all, but a non-Aryan race with religious ideas akin to those of the Egyptians or the Canaanites; of their religious ideas many traces survived in the religions of later Greece and Asia Minor. All arguments against the worship of the double-axe by the Minoans which are based on the supposition that their mental type was identical with that of the later Greeks are beside the mark. The fact that the double-axe was actually venerated by the Minoans is shewn by (among other things) the discovery of a scene of its being worshipped, on a sarcophagus from Agia Triada. This being so, Dr. Evans's conclusion that it was the emblem of a god, who is the same as the god of Labraunda, is evidently entirely justified. The Carian god was identified with Zeus; the great god of Crete was Zeus. The double-axe god of the

called by the same name? The old explanation, due to Brugsch but afterwards abandoned by him, was that the word was originally Egyptian, being '*Ro-per-ro-henet*,' which might mean 'Temple-mouth-canal,' and that the Knossian Labyrinth derived its name from the Egyptian one. *Ro-henet* ('Canal-mouth') or **La-hene*, as it would have been pronounced in the dialect of the Fayyûm, is certainly the original form of the name of Illahun

Labyrinth was the later Zeus Kretagenes, just as the double-axe god of Labraunda was the Karian Zeus. (iii) Mr. Rouse does not believe that the double-axe had any particular connexion with Knossos or that the Knossian palace has any special claim to the title of 'House of the Double-Axe': other signs besides the axe occur on its walls, the signs were all possibly never intended to be seen, having been covered with plaster, and the double-axe occurs at Phaistos and at other places as well as at Knossos: there ought therefore to be 'Houses of the Double-Axe' and 'Labyrinths' too. Other signs certainly occur at Knossos: but the continued excavations shew that the double-axe is the commonest, and from the way in which it is inscribed it seems to have a special significance there which the others have not. That the signs were in many cases originally covered up with plaster or gypsum slabs is very probable, but this would not affect the argument. They must have been intended to mean something, or they would not have been cut on the blocks at all. It seems to me (as I pointed out in *Nature*, Nov. 20, 1902) very probable that the sign was cut on these blocks as an intimation to the quarrymen or masons as to the destination of the blocks in question—they were intended for the 'House of the Double-Axe'—just as in Egypt blocks intended for the temple called 'House of Millions of Years,' or (at Deir el-Bahari) *Néfer-renput*, 'Beautiful of Years,' would have the signs  or what not painted on each as an intimation to the masons. This may well be one of the many small points in which Minoan practice resembled the Egyptian. But I do not quite gather from Dr. Evans's report on the excavations for the year 1901 (*B.S.A.* vii. p. 112) whether he considers that the fine limestone wall at the western end of the 'Megaron of Double-Axes,' on which the double-axe is most in evidence, was ever masked by gypsum-slabs or plaster at all. In *B.S.A.* viii. p. 66, in dealing with the distaff signs on another similar wall, he inclines to the view that they had been covered with plaster, as at Phaistos. The pillar illustrated in *Mycenaeen Tree and Pillar-Cults* (Fig. 5) and other

gypsum pillars and door-jambs which are inscribed with the double-axe sign were surely, however, never covered up by facing-slabs or plaster any more than were the gypsum pavements. As regards Mr. Rouse's denial of the exclusive claim of Knossos to be a 'place of the Double-Axe,' certainly Phaistos, for instance, may just as well have had its shrine with the emblem of the common god of the Cretans as any other Cretan city or palace, and this may have been called its *labraunda* or *labyrinth*, its 'place of the Double-Axe.' But the Labyrinth of the Greeks was 'in the Knossian territory'; Minos, the king who owned the Minotaur (Dr. Evans compares the bull-frescoes of Knossos), was king of Knossos: Knossos was traditionally the chief city of the island and the centre of the Minoan thalassocracy, therefore it was probably also the chief centre of the worship of the God of the Double-Axe, Zeus Kretagenes, wherefore Dr. Evans is again justified in regarding it as the 'Place of the Double-Axe' *κατ' ἐξοχήν*, the Labyrinth *par excellence*. That there may also have been confusions with the Gortynian cave, which may have been called the 'Labyrinth' on account of its many windings, and become regarded as the true Labyrinth of the Minotaur, is possible. Mr. Rouse quotes from Strabo (viii. 369) a catacomb near Nauplia which was called 'the Labyrinth,' so that the name was evidently generally used in late times for labyrinthine caves, just as it might be now. Mr. Rouse says that the Knossian palace is neither mazy nor labyrinthine, but I for one have found it satisfy all reasonable demands in this respect: there is much more at Knossos than 'fine open courtyards and straight corridors,' as a glance at the plan will shew. A point on which Mr. Rouse seems, however, to have some justification for his criticism is in respect of the pillars of the Pillar-Rooms. He denies their sacred character: that may pass, though most of us will think Dr. Evans is right on the point; but his contention that they did not stand free, but, whether also cult-objects or not, in every case performed an architectural function in upholding the roof, seems extremely probable.

(*el-Lahun*), close by at the opening of the Hawara Canal into the Bahr Yusuf, but '*Ro-per-ro-henet*' is a purely hypothetical form, which is not known to have existed, and in any case would have been pronounced by the people of the district **Elpi-la-hene*, which is not much like *Λαβύρινθος*, while *Labraunda* is.

Prof. Spiegelberg, regarding the Egyptian as the original Labyrinth, from which the Greek one took its name, suggested that it was derived from the Graecized Egyptian royal name *Λάβρις*, given by Manetho in this dynasty, the original of which he considers to have been the praenomen of the builder of the Egyptian Labyrinth, King Amenemhat III, 

Ne-maat-Rā.¹² Dr. Evans, not questioning the Egyptological identification, but at the same time believing that the word was of 'Greek' prae-Aryan origin, suggested that 'it is quite natural to suppose that the Greeks, having taken over the word *Λαβύρινθος* applied by the earlier race to the Cretan building, should by a kind of *Volksetymologie* transfer the term to the temple of "Labaris."' ¹³ This seems very probable. But it is to be noted that in the actual list of kings Labaris is the equivalent, not of Amenemhat III, who is *Ammeres*, but of his predecessor Usertsen or Sensusret III. Manetho makes Sensusret the builder of the Labyrinth, not Amenemhat. Nevertheless it is more than probable that 'Labaris' and its variant 'Lamaris' are intended for the throne-name of Amenemhat, the real builder of the Labyrinth: phonetically the name agrees with *Ne-maat-Rā* absolutely: ¹⁴ the placing of him in the position of Sensusret III is due to a confusion with the throne-name of the latter (*see below*, p. 330). It is quite possible that the likeness of the name caused Manetho to take away the great building from its rightful owner in his list, Ammeres, to give it to his predecessor, whose name, as Manetho thought it to be, so closely resembled *λαβύρινθος*. And no doubt others also believed that the name of the Egyptian Labyrinth was connected with that of the King Labaris or Lamaris.

It is most probable that in reality it received its name merely on account of a supposed resemblance to the original Labyrinth in Crete, and that a popular etymology assisted the identification. This resemblance may have been striking.

The position of the Egyptian Labyrinth at Hawara, close to the opening of the Fayyûm, its character, and date, have been well known since the investigations of Lepsius¹⁵ and Petrie.¹⁶ Little or nothing remains of it now, but in the old days it had been the theme of wondering comment by Greek visitors to Egypt. Herodotus makes much of it, and so do Diodorus, Strabo, and Pliny. It finally disappeared in Roman times: the brick chambers which Lepsius thought were its foundations are those of a late Roman village

¹² *Orientalistische Literaturzeitung*, Dec. 1900, pp. 447-449.

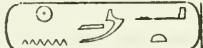
¹³ *J.H.S.* xxi. 109, n. 6.

¹⁴ *Ne-maat-Rā* would have been pronounced something like **Nemari*, as *Neb-maat-Rā*, the praenomen of Amenhetep III, was, we know,

pronounced **Nimmarî* (Babylonian form *Nim-murtya*), and the interchange of *n* with *l* is usual: cf. e.g. *nas* tongue; Coptic *las*.

¹⁵ *Denkmaeler*, i. 47, 78; Text ii. p. 11 ff,


¹⁶ *Hawara, Bihmet, and Arsinoe*, p. 4 ff.



which was built on its ruins. The extent and position of the original building were made out by Lepsius, and a restoration of the plan has been attempted by Prof. Petrie from the scanty evidence as to its construction given by the Greek and Roman writers. It was a great temple,¹⁷ with magnificent pillared halls, side-chambers, and outbuildings, erected by the greatest pharaoh of the Twelfth Dynasty, Amenemhat III (circa 2200 B.C.), immediately in front of his pyramid at Hawara: there is no doubt that it was the funerary temple of the pyramid, erected by the king for the due performance of the funeral rites after his death. But unlike the temples of previous kings of the Dynasty at Lisht or Dashur, the pyramid-temple of Amenemhat III was of enormous size and splendour. That it was a temple was not generally realized by the Greek visitors to it. Strabo knew that the king who built it, whom he calls Maïndes or Imandes, was buried not in the Labyrinth, as Diodorus says, but in the pyramid, and that the halls of the Labyrinth had been built for some sort of religious purpose.¹⁸ For most of the other writers it was the king's tomb itself: Diodorus calls it the sepulchre of Mendes or Maïros, the copyists of Manetho that of Lamaris, Labaris, or Lachares. Pliny quotes Lyceas as saying that it was the tomb of Moiris, and Demoteles as saying that it was the 'palace' of king Moteris. The various forms of the name of the king who built it are interesting, and can mostly be traced back to that of its actual builder. Even Pliny's 'Petesouchis or Tithoes' is evidently Amenemhat III: the name *Petesouchis* being 'He who is given by Sebek,' the crocodile-god of the Fayyûm, the land of the lake Moeris for which Amenemhat did so much. Lyceas, as quoted by Pliny, actually ascribes the building of the Labyrinth to king Moiris the lake-maker. The name *Moiris* is probably the word *Mer-uer*, 'Great Lake,' (the king being a sort of eponymous hero of the lake), confused with the actual praenomen of the king , which, as the form *Moteris* shews, was in the late period read *Maāt-n-Rā* (**Materi*'), as well as (properly) *Nc-maāt-Rā*.¹⁹ Diodorus's name, Marros, is evidently *Ma-Rā* or *Ma-n-Rā* uncontaminated by *mer-uer*, and as a matter of fact he separates the Maker of the Lake from the Builder of the Labyrinth, calling the former Moiris. Herodotus evidently knew of the king Moiris, but forgets to insert him in his historical sketch, speaking merely of the lake as 'called that of

¹⁷ Its size may be judged from Prof. Petrie's remark (*loc. cit.* p. 5) that 'all of the temples on the east of Thebes [all Karnak and Luxor, that is] and one of the largest on the west bank [the Ramesseum] might be placed together on the one area of the ruins at Hawara.'

¹⁸ xvii. 1. 37. Πεποιῆσθαι δέ φασι τὰς αὐτὰς τοσαύτας, ὅτι τοὺς νημοὺς ἔθος ἦν ἐκείσε συνέρχεσθαι πάντας ἀριστίνδην μετὰ τῶν οἰκείων ἱερῶν καὶ ἱερείων, θυσίας τε καὶ δικαιοδοσίας περὶ τῶν μεγίστων χάριν.

¹⁹ Cf. Griffith, *Äg. Zeits.* xxxiv. (1896) pp. 49,

50: 'On substantive compounds formed with adjectival .

'Possessing the justice of Rā,' like  

Nekau (Νεχαώ); 'Possessing Doubles.' *Maat-n-Rā* would mean 'Justice of Rā' simply. It is more than probable that the name was in later times often read *Maat-n-Rā* or simply *Maat-Rā*, 'Justice of Rā' (**Ma-Ri*'), *Máppos*, *Moiris*) as well as *Nc-maāt-Rā*, 'Possessing the Justice of Rā' (**Nc-mari*'), *Námapis*, *Áámapis*).

Moiris,' and assigning the Labyrinth to his 'Dodekarchy,' the semi-independent princes under the Ethiopians and Assyrians. He seems then to have been unaware of any connexion between the builder of the Labyrinth and the Moiris who created the lake. Is Diodorus swayed by the authority of Herodotus when he, too, assigns them to two different kings? He was aware that Herodotus was in error in assigning the Labyrinth to the Dodekarchy, but makes the king Mendes²⁰ or Marros who built it a totally different person from Moiris. His information was evidently correct, since Marros is a form of the praenomen of the real builder, but, being misled by Herodotus, he did not identify Marros with Moiris. Manetho might have been suspected of a similar exaggerated respect for the authority of the classic Herodotus,²¹ for he appears at first sight to have attributed the Labyrinth to Senusret (Usertsen) III, the predecessor of Amenemhat who built the lake. But this is only apparent: in all probability, as we shall see, he stated both the name of Amenemhat and the fact that he built the Labyrinth very plainly: it is his copyists who have garbled him here as elsewhere. Manetho's name for the Labyrinth-builder is, as we have seen, *Lamaris* or *Labaris*: a third form, *Lachares*, is also given by the copyists. The lake is not ascribed to this king. According to the order of the kings, he ought to be, not Amenemhat III, but his predecessor, Senusret III, the Manethonian representative of Amenemhat III being *Ammeres*. It has therefore been generally supposed that Manetho had simply erred in attributing the building of the Labyrinth to Senusret (Usertsen) III. Prof. Spiegelberg, however, following Unger, has preferred to suppose that Lamaris is really the representative of Amenemhat III, owing to the similarity of his name to the praenomen of that king (*see above*, p. 327). Ammeres and Ammenemes, his successors, therefore must, if Spiegelberg's view be accepted, both = Amenemhat IV, since †*Skemiophris*† (read *Skénophris*), the third from Lamaris, is evidently the queen Sebekneferu-Rā (pronounced **Skénofrerîe*). It seems, however, that although Lamaris = Ne-maat-Rā (Amenemhat III), it is unnecessary to suppose that Senusret III is unrepresented in the Manethonian list or that Ammeres as well as Ammenemes = Amenemhat IV. A way out of the difficulty is shewn us by the variant form of the name Lamaris which is also given us, namely *Lachares*. Now the praenomen of Senusret III is *Kha-Kau-Rā* (**Khakariê*), and Prof. Petrie has pointed out²² that *Χαχαρης* is probably a corruption of this, the mistake of λ for χ being easy. Since the Manethonian list of the kings exactly tallies with that of the monuments on the supposition that Lachares = Senusret III, we may agree that Prof. Petrie

²⁰ *Mendes* is a confused interpolation like that of the name of the pharaoh Sheshonk (Shishak of the XXIInd Dynasty) into the list of XIIth Dynasty kings as 'Sesongosis,' instead of the true name Sesostris (Senusret I). Strabo's name for the king, *Maïndes* or *Imandes*, is the same: he calls Memnon (Amenhetep III) also *Smandes*. The original

of this name is the later king *Nesi-ba-neb-dad* (pron. **Nsrindidi*?) of the Tanite XXth Dynasty.

²¹ On the probable influence of the Herodotean authority on later writers see *J.H.S.* xxiv. 'Nitokris-Rhodopis.'

²² *Hist. Eg.* i. p. 178.

is right, and that Manetho wrote the name of Sensusret III *Χαχαρης* or *Χακαρης*. Why then is he also called *Λαμαρις* or *Λαβαρις*, which is the name of Amenemhat III, and given the building of the Labyrinth, which was Amenemhat's work? The solution is that Manetho's original list gave after Sesostris II (*Sensusret* II):—Khakhares (*Khā-kau-Rā* Sensusret III), Lamaris (*Ne-maat-Rā*), ὃς τὸν ἐν Ἀρσενούτῃ λαβύρινθον ἐαυτῷ τάφον κατεσκεύασεν, who was also called Ammeres (*Amenemhat* III), followed by Ammenemes (*Amenemhat* IV) and Skenophris (*Sebek-neferu-rā*). The double name of the king who built the Labyrinth confused the copyists, and when the barbarous-sounding *Χαχαρης* had become corrupted or (quite possibly) emended into *Λαχαρης*, it was an obvious way out of the difficulty to suppose that *Λάχαρης* was the same person as *Λάμαρις*, the builder of the Labyrinth, Ammeres being a separate king. Thus Sensusret III appeared to be the builder of the Labyrinth according to Manetho. We see, however, that in reality Manetho knew perfectly well that Amenemhat III was the builder of it, and mentioned both his praenomen (in a more accurate form than that current in his day) and his nomen. The latter he may very well have given originally as 'Ammenemes, called also Merres, Marros' (or some such form); this the later copyists combined and compressed into *Ammeres*. The influence of a popular etymology, based on the name *Λάβαρις* or *Λάμαρις*, in definitely fixing the name 'Labyrinth' on the temple at Hawara, has already been noticed. May the form *Λάβαρις* be itself a result of the conferring of the name Labyrinth on the temple of Lamarin?

Strabo describes the position of the building very accurately; in his and Pliny's time its ruins appear to have been still remarkable, though the latter notices its increasing destruction by the ravages of the surrounding people, who found in it the usual convenient quarry of ready cut and polished stone which every Egyptian temple has been to the later inhabitants of its vicinity.²³ He also notes that 'one person, and one only, has made some slight repairs to the Labyrinth; this was Chaeremon, an eunuch of King Necthebis, who lived five hundred years before the time of Alexander the Great.' The only Egyptian kings with a name resembling 'Necthebis' are Nekht-her-hebet and Nekhtnebf of the XXXth Dynasty, the last native rulers of Egypt, who lived only half-a-century before Alexander. The mention, however, of Alexander in connexion with 'Necthebis' makes it very probable that there has been some confusion as far as the date is concerned, and that slight repairs to the Labyrinth were really attempted by some Asiatic Greek chamberlain of Nekht-her-hebet's (Necthebis = **Nekht-hebe*), who as a Greek would feel the same interest in the world-renowned Egyptian Labyrinth as his fellow-countrymen. In Herodotus's time the vaults had been used to bury the sacred crocodiles in.

Both Pliny and Strabo remark the wonderful polished stonework of the place, and the former notices a thing which surprised him, namely that at the

²³ The neighbouring pyramid of Usertsen II at Illahun was raided for stone as early as the time of Ramses II.

entrance it was constructed of Parian marble, while the rest was of syenite. This 'Parian marble' is interesting. It was of course not really Parian marble, but evidently some kind of local crystalline marble or quartz-veined limestone; Lepsius, during his investigation, discovered what are undoubtedly remains of the actual marble mentioned by Pliny, in the 'grossen Säulentrümmeln und die mächtigen Architrav- oder Mauerstücke . . . aus einem sehr harten marmorartigen Kalkstein, der zuweilen Quarzadern hat und öfters ziemlich grau wird, im Ganzen aber von schöner weissen Qualität ist (das marmor Parium des Plinius).' This use of fine and bright white stone seems characteristic of this particular period of Egyptian history: shining white quartzite was much used then, as for instance by the same king Amenemhat III for his twin colossi on the 'pyramids' of Biahmu, which are described by Herodotus (ii. 149). It may well be that this beautiful material was also used in the construction of the Labyrinth. Pliny notes that all the Labyrinths of the ancient world, of Lemnos and of Italy, as well as of Crete and Egypt, were covered with arched roofs of polished stone. It is easily comprehensible that to those who first compared their mazes of corridors, courts, and stairways, and had seen the shining white limestone portals and walls of the one and seen or heard traditions of the glittering gypsum floors, walls, and pillars of the other,²⁴ the temple of Hawara and the Knossian Labyrinth may have seemed by no means unlike. There is no need then to seek for any far-fetched Egyptian derivations for the word 'Labyrinth.' This and the other labyrinths were so called on account of their real or supposed resemblance to the original Labyrinth, the 'Place of the Double Axe,' at Knossos.

The actual resemblance must not be pressed: one was a funerary temple, the other, though it may have partaken to some extent of the character of a temple of the God of the Double Axe, was primarily a royal palace,²⁵ and no doubt there was a radical difference of plan and purpose between them; but the superficial resemblance, the resemblance of the materials and general appearance of both, was enough to make the Greeks give the one the name of the other.

This resemblance of outward appearance is extremely interesting, in view of the probable nearly contemporary date of the two buildings. The Egyptian Labyrinth may have been older, but we do not know that it was so very much older than the Greek one, in which have been found Egyptian

²⁴ I am assuming that much of the plaster coating of the stuccoed gypsum walls which were uncovered had disappeared in antiquity as now. But not all the gypsum blocks were covered up with stucco, apparently. Many of the fine facing-slabs cannot have been, nor can most of the pillars; while the gypsum pavements were certainly never plastered. It is true that Diodorus speaks of the Cretan labyrinth having wholly disappeared (ἀλλ' ὁ μὲν κατὰ τὴν Κρήτην ἠφανίσθη τελέως, εἴτε δυνάστου τινὸς κατασκάψαντος εἴτε τοῦ χρόνου τοῦργον λυμνημένον· ὁ δὲ κατ' Αἴγυπτον ἀκέραιον τὴν ὕλην κατασκευὴν

τετήρηκε μέχρι τοῦ καθ' ἡμᾶς βίου, i. 61), but the tradition of its characteristics had evidently survived and, since the site was always kept clear of later buildings (*B.S.A.* x. p. 51), bits of the palace may have been seen from time to time. Diodorus's statement is a curious reversal of the actual facts. Now it is the Egyptian labyrinth which has totally disappeared, while the Cretan one has been discovered and proves to be comparatively well preserved.

²⁵ The Minoan King may also have been high-priest of the Pelasgian Zeus of the Double Axe.

relics which are not more than a couple of centuries later than the time of Amenemhat III. We may not without reason compare the Egyptian use of the white 'Marmor Parium' and quartzite in his reign with the nearly contemporary use of white selenite (crystalline gypsum) by the Minoans. Gypsum itself occurs in Egypt on a XIIth Dynasty site: I found several fragments, which looked as if they had been worked, last year close to the southern pyramid of Dashur. They possibly came from its temple. And in the excavation of the funerary temple of Mentuhetep III, of the XIth Dynasty, last year, were found two fragments of actual thin facing-slabs of polished white crystalline marble, of a kind which Mr. Somers Clarke informs me is found near the Thebaid; these I believe to be, from the position in which they were found, parts of the XIth Dynasty fabric, and not of later



FIG. 1.--ELEVENTH DYNASTY WALL, DEIR EL-BAHARI.

date. In them we have a precise parallel to the gypsum facing-slabs of Knossos.

This contemporary use of shining white stone in architecture in Crete and Egypt seems to me to be more than a mere coincidence, and to point to a connexion in this matter as in others. The idea probably came to Crete from XIIth Dynasty Egypt: the Egyptian instances are, if anything, earlier, not later, than the Cretan; the fashion is not seen in any later period in Egypt, so far as is known, so that Crete probably did not give it to Egypt.

This resemblance makes it conceivable that other apparent similarities between details of Minoan architecture and that of Egypt under the Middle Kingdom are more than mere coincidences. The finest stonework, as regards blocks of white limestone for walls, in Egypt is that of the Middle Kingdom. The newly-discovered facing walls (Fig. 1) of the Northern Court

of the Temple of Mentuhetep III at Deir el-Bahari, already mentioned, are the chief specimens of this splendid Middle Empire stonework in Egypt. The somewhat later remains of masonry at Dashur are another instance of this work. The masonry of the XVIIIth Dynasty in the Great Temple at Deir el-Bahari, which has hitherto been considered good, is quite poor in comparison with that of the Mentuhetep temple. Other fine limestone walls in Egypt are so rare, owing to the depredations of later stone-hunters, who have used ancient limestone buildings as quarries from the days of Ramses II. to those of Abbas II., that the great Temple of Deir el-Bahari must be taken as the chief specimen of limestone masonry later than the Middle Kingdom. The XIXth Dynasty work at Abydos is good, but the blocks are small and irregularly fitted, as in the XVIIIth Dynasty Deir el-Bahari temple. It is the size, regular laying, and fine jointing of the Middle Kingdom blocks that are so remarkable. When the XIth Dynasty walls at Deir el-Bahari were found, those who had seen all three were immediately struck with the outward resemblance of the first not only to the Dashur walls, but also to the best masonry at Knossos, especially that of the North Gate. When we remember that they are nearly contemporary, the similarity of the sizing and spacing of the blocks in the Egyptian and Cretan masonry in question becomes suggestive. Of course the Egyptian masonry of the Mentuhetep temple of Dashur, and probably of the Hawara Labyrinth also, is better than that of Knossos, but the resemblance remains, especially when we take into consideration another fact: the collocation in both cases of square pillars with the fine masonry. This third resemblance may be purely accidental, but it is interesting when taken in connexion with the above. Very characteristic of Minoan architecture is the use of the simple square pillar. We see it in the Portico (Fig. 2)²⁶ of the North Gate at Knossos, the resemblance of whose walls to the stonework of the Egyptian Middle Kingdom we have already noticed; in the Northern Building at Knossos,²⁷ which had two very perfect pillars of this type in one room (Pl. XIV. 2); and in the pillar-rooms of Phylakopí,²⁸ Zakro,²⁹ and Palaikastro.³⁰ References to other examples at Knossos and Phylakopí are given in *Phylakopí*, p. 261, note 1. 'All the Cnossian pillar-rooms,' says Dr. Mackenzie (*loc. cit.*), 'belong in construction to the first great period of the palace; and the occurrence of such pillars on other Cretan sites goes to show that by this time they had become a regular fashion based probably on a long previous history. The cumulative evidence from Crete is sufficient warrant for assigning the Melian pillar-houses to the same general era and to the same Aegean style of architecture.' At Phylakopí they belong to the Second City: that is to say they were a feature of Aegean architecture in the early Minoan period, not so very long after the time of the XIIth Dynasty.

Now square pillars were probably a feature of Egyptian architecture

²⁶ *B.S.A.* viii. Fig. 3.

²⁷ *ib.* p. 6; ix. Pl. IV. 4.

²⁸ *Phylakopí*, Figs. 8, 9.

²⁹ *B.S.A.* vii. 131.

³⁰ *ib.* viii. 316.

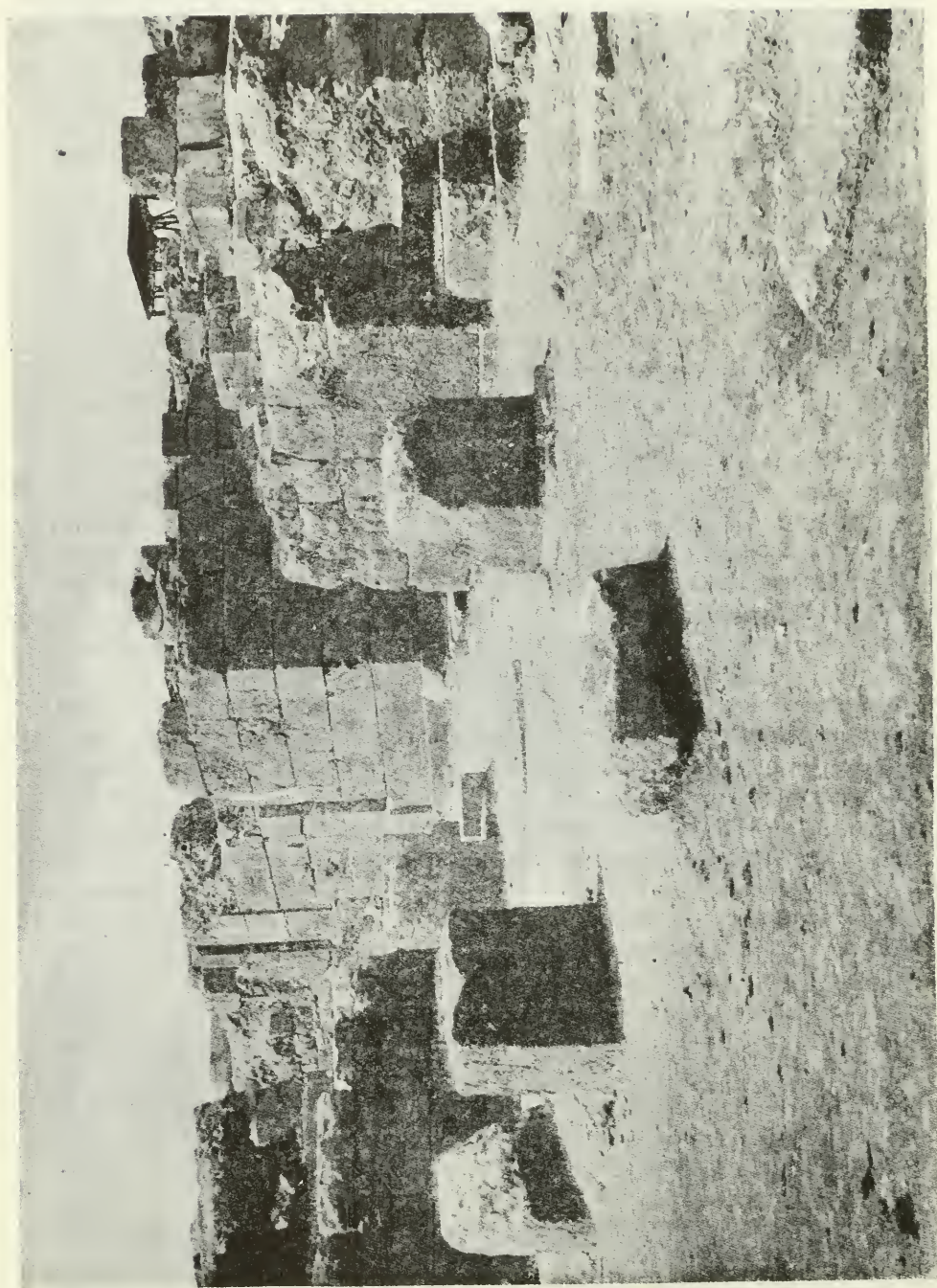


FIG. 2.—PORTICO OF THE NORTH GATE OF KNOSSOS. (From *B.S.A.* viii. Fig. 3.)

in all ages, but it is noticeable that some of the best specimens we have are of the period of the Middle Empire. Pl. XIV. 1 and Fig. 3 shew pillars of this type from the lower colonnade of the Mentuhetep temple at Deir el-Bahari (which was probably imitated by the builders of the colonnades of the later Hatshepsu temple in the same place), and the well-known Temple of the Sphinx at Giza, which is very probably a work of the end of the XIIth Dynasty. The resemblance of the Mentuhetep pillars in Pl. XIV. 1 to those of the Northern House at Knossos (Pl. XIV. 2), may be merely fortuitous, but it is at any rate striking. The construction



FIG. 3.—TEMPLE OF THE SPHINX AT GIZA.

is the same. In several instances at Deir el-Bahari the lowest portion of a pillar is in one piece with the pavement block on which it stands, as in the Knossian example. The size is also about the same in both cases.

The photograph of the Temple of the Sphinx (Fig. 3) shews the XIIth Dynasty combination of square pillars with splendid wall-masonry on a grand scale. This instance is especially interesting, since it seems highly probable that this temple was the work of Amenemhat III, the king who built the Egyptian Labyrinth,³¹ and it may well be that the Labyrinth was built in much the same simple but grandiose style. This is very possible, since

³¹ That some considerable work was done at Giza under the XIIth Dynasty which involved the destruction of more ancient buildings there is proved by the fact that fragments of a lintel and walls bearing the name of Khāfrā (whose statues were found thrown down a well of the Sphinx Temple) were used in the construction

of the southern pyramid of Lisht. And a theory has lately been put forward which argues that the face of the Great Sphinx is a portrait of Amenemhat III. This king was extremely fond of sphinx making, and it is well known that the strange sphinxes found at Tanis, which used to be considered to belong to the

it is noticeable that none of the ancient writers who refer to it seem to speak of the walls of the Egyptian Labyrinth as decorated with anything much in the way of inscriptions;³² and this unusual absence of inscriptions is one of the most striking features of the Temple of the Sphinx and of the little temple of Kasr es-Sagha, near the northern shore of Lake Moeris, which is probably of Middle Empire date, and may well be also the work of Amenemhat III. The resemblance between the two Labyrinths which so struck the old observers as to induce them to give the name of the original Labyrinth, the old 'Place of the Double Axe,' to the Egyptian building of Moeris, may then not have been confined to complexity of plan and to portals and roofs of shining stone, but have extended to the combination of fine masonry and square pillars; the uninscribed masonry, so different from the richly-hieroglyphed walls of the later Egyptian temples which they saw elsewhere, may also have reminded Greek visitors of the simple and unadorned stonework of Greece.

At all events it is curious to find that the presumed ancient resemblance of the Egyptian XIIth Dynasty Labyrinth to that of Minoan Crete (since the one took its name from the other), is more or less borne out by an actual superficial resemblance of some of the architecture of the XIth and XIIth Egyptian Dynasties (of which we know little more than the examples to which I have referred above) to characteristic features of the probably nearly contemporary architecture of Minoan Greece. Superficial resemblances were no doubt enough to attract the attention of the old Greek visitors to Egypt, as well as of the modern archaeologist who is not at the same time an architect; but the resemblances in question seem to me very probably more than superficial. Their actual contemporaneity, which is known to us but was not known to Herodotus and his contemporaries, seems to me to be a cogent argument in favour of this view. If an architect is disposed to dismiss them forthwith as no more than skin-deep, he should remember this fact, that the early Minoan architects were either actually contemporaries with or but little posterior to the Egyptian architects of the Hawara Labyrinth, the Temple of the Sphinx, and the XIth Dynasty colonnades and walls at Deir el-Bahari, and suspend his judgment. Diodorus may well have been near the truth when he said that Daedalus came to Egypt, admired the Labyrinth, and built one like it for Minos.³³ Just as

Hyksos period, have now been proved by M. Golenishtchev to be undoubtedly the work of Amenemhat III. It is by no means impossible that not only the Labyrinth, but also Kasr es-Sagha, the Temple of the Sphinx, and even the Great Sphinx itself, are all the work of this great king. His sphinxes at Tanis, his conception of the Labyrinth, as well as his work in connexion with Lake Moeris, shew that he was a man of original mind, and it may be that he had some puritanical ideas of his own on matters pertaining to religious art,

which led him to insist on an entire absence of inscriptions from the walls of the temples which he built, as well as to strike out an unconventional and peculiar line in his sphinxes.

³² Few fragments of inscriptions have been found, but enough to shew that the Labyrinth was not so entirely uninscribed as the Temple of the Sphinx. In comparison with the Ptolemaic and Roman temples, however, it probably seemed simple and unadorned.

³³ Cf. Plin. *N.H.* xxxvi. 75.

the prehistoric Aegeans resembled the early Egyptians in their love of fine stonework in the small matter of bowls and vases, so may they also have resembled them in their love of fine stonework in the large matter of building. And the resemblance which the Greek visitors traced between the two Labyrinths may not have been so very wide of the mark after all. How far this resemblance is to be traced to Egyptian influence in Greece remains doubtful. At any rate we know that this influence existed earlier than the time of the XIIth Dynasty. How far resemblances of this kind are to be traced to 'influence' rather than to the closer connexion of a common origin of the two civilizations is a point which probably will not be settled for many years to come. It is now evident that the prehistoric civilization of Greece had a very close connexion with that of Egypt, and that the Egyptian archaeologist must have much to say in the discussion of it. If ancient Egyptian civilization was oriental, that of prehistoric Greece was oriental also: its religion seems Canaanitish, its language was probably not Indo-European, its writing is hieroglyphic and resembles Egyptian hieratic scratched on Babylonian clay tablets, and if its art seems unorientally free and even beautiful in comparison with that of Egypt, the fact is that it seems so only to those who do not know that Egyptian art was neither so fettered nor so ugly as the superstition of the schools would have it. That there is, notwithstanding, *something* 'Hellenic' in Minoan or Mycenaean art is undoubted. If we were to suppose that the prehistoric Greek and the Egyptian civilizations had a common origin back in the darkness of the Age of Stone, that they were twin cultures of the same Mediterranean stock, the one having developed, however, amid the diverse isles and changing seas and skies of the Aegean, the other on the monotonous banks of the Nile, we can see how the northern culture would naturally shew greater freedom and variety, often running off into mere bizarrerie, but as often exhibiting something of that spirit which we, knowing it in the renaſcent Aryanized civilization of the later day, call 'Greek.'

H. R. HALL.

TSADE AND SAMPI.

IN my contribution on the '*Sematography of Greek Papyri*' (*J.H.S.* xxii, 1902) I included the Ptolemaic symbol T or Ϡ = 900 among those of whose origin no satisfactory explanation could be offered (p. 138); although on p. 145 I identified the symbol with the later minuscule symbol 'sampi' Ϡ or Ϡ = 900, and pointed out the improbability of any association of the latter with either Pi or San-Sigma, whether in forms or arithmetical values. For the rest, as I said, 'we must wait until we are in possession of ante-Ptolemaic documents, or of some facts yet to be supplied by epigraphy.'

This paper is the report of a more thorough survey of the field of Greek and general archaeology on all the questions and problems involved in the explanation of the sign. These are in the best sense trivial, lying at the crossing of the ways of not a few important theories, to which the foremost scholars have recently devoted much investigation—the composition and history of the Greek alphabet, particularly as regards its application for numeration, the enigmatical Tsade, the mutual relations of the ancient alphabets, the antiquity of S. Semitic (Arabian), Minaean, and Sabaeen inscriptions, and the place of the Phoenician alphabet in the history of primitive Hellas.¹

It has been frequently remarked to me as a commonplace by well-informed epigraphists that since the labours of Kirchhoff nothing important has been done in the Greek alphabetology. It would further be disingenuous on the part of an English writer having access to the admirable unprejudiced and balanced epitome of the position of the study in 1892 by Dr. Wm. Larfeld in Müller's *Handbuch* (pp. 494–536, etc.), were he to publish as original matter any survey of the subject. There is practically nothing new to be said.

But although no new evidence is at present forthcoming, so much ingenious theory has been lavished upon the fascinating puzzles of the

¹ The investigation has been made as part of the work of the department under Prof. Ernest Gardner at University College, London, with whom the present writer has had the advantage of discussing the epigraphic and other evidence—as also with Mr. G. F. Hill, Dr.

Head, Dr. Kenyon, and other gentlemen of the British Museum, Prof. Conway and Mr. Witton (to all of whom the thanks of the writer are due)—so that the *résumé* here offered is something more than a statement of the writer's own findings.

subject, that question-begging terms and forms of expression are insinuating themselves which may soon become a hindrance in the path of the serious student. To such, a severe re-statement of the present condition of our knowledge derived from documents by legitimate processes may be of real service. By confining myself to the history of Θ and T I hope to render such a service in regard to the important questions above alluded to.

It may be at once said that *according to the prevalent views* the Greek sign of numeration $\text{T}=900$ would have the following life-history, viz. that it is the sign which is found on inscriptions and in the earliest hand-written documents (commonly rounded, sometimes shaped T) and in the later manuscripts in the form Ϡ , and there called Sampi, its numerical value being still 900; that this early square sign T is the same which occurs on a few monuments with the sound-value σ or $\sigma\sigma$; that this is identical with מ , the Semitic Tsade; that this Semitic letter is the representative in Semitic alphabets of the Egyptian 'snake' = ts 𐩐 .

This is all highly desirable, if true, as it satisfies several very reasonable hypotheses, and proves for this sign a life-history of at least five thousand years, from the formation of the hieroglyphic alphabet to the written and printed (classical) Greek of the present day.

Further it would be explained that as a numerical sign it has been in use from the ninth century B.C.; that having been disused in the final fixing of the early Greek alphabet, it was taken up again when the alphabet was applied to notation of numerical values, though not restored to its place; that thus it has come about that while in the parallel Hebrew system צ = Tsade = 90, in the Greek T = Tsade = 900, being placed last at the end of the completed Greek alphabet ending with omega.

Now—how much of this is demonstrable, and how much is purely hypothetical?

* * * * *

The results of the present investigation may be summarily given as follows :—

The occurrence, shape, and numerical value of $\text{T}=900$ in the papyri are beyond debate, though the sign is not very common; still rarer is the square-form T , yet this also may be accepted as a proved variant of Θ . The early minuscule Ϡ has passed without challenge as a direct descendant of T ; and the slow conversion in mediaeval MSS. into the best-known form Ϡ is a fact in palaeography which is not disputed.

But the name Sampi, which first appears in the second half of the seventeenth century, is a double misnomer. For, as the noted statement of Herodotus indeed asserts, San is to be associated with Sigma, and not with Tsade, to which Θ , if a sibilant letter-form at all, must be referred; while with Pi, in spite of the late accidental similarity, Ϡ has nothing at all to do. The double stroke within the curve does not make its appearance till quite late, rarely before the end of the ninth century.

What of the theory that this sign is identical in origin with the

alphabetic letter of the same shape **T** which occurs in indisputable readings only in four proper names (two of persons, two of places) found on an inscription of Asia Minor and a group of coins from one Thracian town, of the fifth, fourth, and third centuries B.C.? The theory has been accepted by some very eminent epigraphists, and is supported by the general opinion of writers on these subjects. Yet the form of **T** and the fact that it is a substitute for σ or $\sigma\sigma$ in the words mentioned are indeed the only quite certain facts which are known about it; its date is sure enough, but its exact meaning is less sure, from the circumstance that the certain readings occur not in ordinary Greek words but in names whose origin is in one case (*Μεσημβρία*) conjecturally Greek, in one case (*Ἀλικαρνασσός*) not Greek at all, while both person-names (*Θατάτιος* and *Παννασσις*) suggest an 'Anatolian' origin; and in the Thracian group the letter is used in associations which suggest the possibility at least of local influence, while there is evidence of racial intercourse to explain the reappearance over-sea. Its sound is most probably a sharp sibilant, though it may be partly a dental and conceivably a mere variant of Tau; its origin may possibly be local (Thracian), either as a survival of a barbarian sign (to represent a local sound) or a modification of a Greek letter; the oft-repeated reference to a Phoenician origin or general Greek use having nothing to support it.

Next, the identification of **Ϡ**, **ϡ** as a special form of **Ϻ**, the well-attested sibilant of many very early Greek alphabets, though passing current on the confident opinion of some authorities, has nothing more to attest it than this authority. As will presently be shown, there are some facts which stand ready to corroborate such an identification and make it very satisfactory, could the direct evidence be first adduced, but the direct evidence is quite insufficient at the present time. Nothing that we know of the Greek **Ϻ** points to a form like **T**, and Semitic correlates² of similar shape and sound-value are too late and too far away to be adduced alone.

So important, however, is the possibility that **Ϻ** = **T**, **ϡ**, that it is quite worth while to examine the rest of the chain, of which this is the important link. For if **ϡ** is **Ϻ**, then it is the surviving descendant of Tsade, the letter eighteenth in the Hebrew alphabet, whose existing representative in the Semitic languages is of the well-attested type **𐤓** (the Phoenician form). That **Ϻ** = **𐤓** there is no reasonable doubt, although there is not epigraphic or other positive proof. But the further assumption, that this **𐤓** of the Semitic writing is identical with or directly derived from the hieroglyphic **𓆎**, has had as many vehement opponents, during the modern period of scientific palaeography, as it has had warm supporters. All that can be said is that some relation between the Egyptian and the Semitic alphabets is too evident to be set aside, though the nature of the relation, whether in regard to the chronology or to the history or to the detailed morphology, cannot yet be demonstrated.

² Such as Ethiopic forms.

Very similar is the result of attempts which have been made to explain completely the place of T as a numeral. The date of the adoption of the Ionian alphabet as a system of notation has been assigned by the latest authorities (*e.g.* Müller's *Handbuch*) to a time not later than 800 B.C., but the evidence is not strongly conclusive, and it is possible to make out a very good case for a much later date (*e.g.* Keil, in *Hermes* 29, for about 500 B.C.). This increases the obvious difficulty which in any case exists of understanding how it came about that T, if it was a by-form of Tsade, and if it was re-adopted, after disuse, for the lacking sign of the notation-system, was not restored to its place in the alphabet, and why the by-form T was adopted rather than the universal M. Direct epigraphic attestation must be demanded, and that is not adducible, sufficient for the complete demonstration which the case requires. That a sign Θ or T existed as a numeral from the earliest times of Greek writing, may be taken as likely, and that it was placed at the end of the Ionic alphabet for purposes of numeration, but that this is the lost Tsade is by no means to be accepted yet by any student who wishes to proceed by epigraphic facts.

Indeed it must be admitted, however reluctantly, by every candid investigator, that the evidence which has been adduced for innumerable theories is very meagre in quantity, and has been used for many a *circulus in probando*, concerning that enigma of epigraphy, the history of Tsade. As for the numeral Θ , there is *not much evidence* for its reference with Tsade at all, the known types of which it does not markedly suggest in general shape; while it has *not* its well-known place in the alphabet, and has not the numerical value which that letter possesses in the Hebrew alphabet notation-system, apparently cognate with, or directly borrowed from, the Greek.

The residuum of proof which is actually forthcoming is shown in detail in the following pages. An attempt at a reconstructive conclusion is added at the end.

We have to examine seriatim the epigraphic or historic evidence for the following :—

1. For the existence and form of the sign = 900 in earliest papyri.
2. For the existence and epigraphic form of \mathfrak{m} the sibilant.
3. For the identification of the two foregoing.
4. For the identification of Θ or \mathfrak{m} and epigraphic M.
5. For the identification of M and the Phoenician 𐤌 .
6. For the reference of all these to 𐤌 the Egyptian Ts.
7. For the attribution of the Greek alphabetic notation to Ionian colonies in the ninth century.
8. For the explanation that \mathfrak{m} the sibilant was selected for the required sign = 900, with an examination of the Hebrew system, especially in its divergence at Tsade from the Greek values.

There is in the papyrus no doubt of the intention of the scribe to make a 'square' top, but the same elaborate boldness of the hand as is to be seen in the Pap. Par. 54 makes one still hesitate to decide that this is the simpler normal form as compared with \mathcal{T} .

I venture to select, as perhaps typical of this square form, the instances which follow, which I have taken from the Paris Papyrus 54, but I offer them with the remark that the hand inclines to be ornamental, adorning letters with little cross-strokes, which may be partly the explanation of the very bold hook-like addition to the cross-bar. Still, as Dr. Kenyon observes, when all allowance has been made, it is an undoubtedly good instance :

Pap. Par. 54 *recto*. Atlas of Notices et Extraits, vol. xviii.

A papyrus from the batch from Memphis concerning the twins, middle second century B.C.

In col. 2 :—

$\beta\alpha\pi\tau\alpha\ \overline{\mathcal{B}}\ \vdash\ \mathcal{T}$
 $\epsilon\Gamma\ \alpha\epsilon\ \beta\alpha\pi\tau\alpha\ \overline{\mathcal{B}}\ \vdash\ \mathcal{T}$ ed.

Repeated in a copy which makes part of col. 3 :—

$\kappa\alpha\iota\ \beta\alpha\pi\tau\alpha\ \overline{\mathcal{B}}\ \vdash\ \mathcal{T}$
 $\kappa\alpha\iota\ \beta\alpha\pi\tau\alpha\ \overline{\mathcal{B}}\ \vdash\ \mathcal{T}$ ed.

Fanciful ornaments :—

$\overline{\mathcal{Z}}$ $\mathcal{P}\mathcal{A}$

Another :—

$\chi\omicron\iota\acute{\alpha}\kappa\ \overline{\kappa\epsilon}\ \text{'Α}μ\omicron\nu\alpha\mu\omicron\iota\ \acute{\epsilon}\gamma\mu\alpha\gamma\eta\eta\alpha$
 $\beta\ \vdash\ \pi\ \overline{\mathcal{Z}}$
 $\overline{\mathcal{B}}\ \vdash\ \mathcal{T}\ \xi$. ed.

Willeken, on an occurrence of \mathcal{T} or \mathcal{T} in Ashmolean pap. B. 27, says it is not $\pi\epsilon = 315$ as edd., but $\mathcal{T}\epsilon = 915$,

Pap. Par. 55, 1, 38, apparently mid. second century B.C. Witkowski reads $\vdash\ \mathcal{T}\ \eta$, while earlier ed. reads $\vdash\ \mathcal{T}\ \epsilon$.

(Prodromus grammaticae papyrorum graecarum aetatis Lagidarum, in the *Rozprawy Akademii Umiejętności* Ser. ii, Tom. xi. Cracow 1898.)

Wessely in the papyri he was reviewing in 1883 mentions $\mathcal{A} = 900$ as occurring once.

The sign also occurs in the Naukratis fragments, as in *Inscr. from Naukratis*, E. A. Gardner 1886, Plate XXXII. No. 27 where \mathcal{T} occurs and XXXIV. No. 404 which is an equally bold \mathcal{T} ; cp. also No. 647. But these are both quite isolated signs, so that either of them may be inverted, or result from a mutilated combination of several signs or letters. Nothing of any positive value as evidence can be found in these excellent facsimiles.

This small list of half a dozen is quite sufficient to establish the existence of \mathcal{T} as a square-topped form, commencing with \mathcal{T} ; but whether *this* is the normal or \mathcal{T} it is impossible to decide. \mathcal{T} may just as well be an ornamented

form of \mathbb{T} , as \mathbb{T} a rounding of \mathbb{T} , though Blass decides for the latter (Müller's *Handb.* i. p. 307, 1892). Rounding is admitted by the normal process on papyrus (cp. $<$ with ς (drachmae) $\bar{\tau}$ with $\underline{\tau}$ and \cup (talent) = with \cup (2 obols)). But then in this case there was the need to distinguish by a clear form a special symbol. The origin of \mathbb{T} may be, as Dr. Kenyon in an *obiter dictum* has suggested, an arbitrary development from $\eta = 90$, and there is nothing against the round form as the original. In point of date there seems to be nothing in favour of either: they may be said to appear side by side throughout the papyri; and a remark of Galen's (xvii. i. 525) seems to say that the two forms were regarded as alternative in his day (second century A.D.): \acute{o} τοῦ π γραμματος χαρακτήρ ἔχων ὀρθίαν μέσσην γραμμὴν, ὡς ἔνιοι γράφουσιν τὸν τῶν ἐνακοσίων χαρακτήρα. But of course, he may be thinking of the cursive π , which was round.

I conclude that both \mathbb{T} and \mathbb{T} are well-established forms,⁴ contemporary in the whole papyrus period, and alternative in use; the question of the normal being still in abeyance.

What occurrences of \mathbb{T} the epigraphic sibilant and its shape?

The Halicarnassian inser. Brit. Mus. No. 886⁵ (*I.G.A.* 500) (assigned doubtfully to the middle of the fifth century B.C.) has the words Ἀλικάρνατ[έω]ν, Ὀατάτιος, Π[α]νυάτιος. Of these three, the lacuna after the \mathbb{T} makes a little more doubtful the reading of the first both as regards the form of the letter (which is mutilated) and as regards its exact value; the second is supported by no other evidence; and the third depends upon a comparison with a Πανύαξις as a common enough name (see a somewhat later Halicarnassian inser. *B.C.H.* 4, 295 ff., 525 ff.). It must, even with reluctance, be admitted that there is here no epigraphic evidence which can be relied upon to prove a value for \mathbb{T} .

The shape is exactly T-shape, of the same size as other letters, and plainly distinguishable from forms of \mathbb{T} (Tau) which stand around it. $\Theta\mathbb{A}\mathbb{T}\mathbb{A}\mathbb{T}\mathbb{I}\Theta\xi$ is a particularly good reading as regards clearness of inscription.

The next word, the fourth on our list and the first ordinary Greek word in which the presence of \mathbb{T} is even alleged, occurs in an inscription of Teos, on the Ionian mainland. It runs as follows: δέχοιτο ἢ ληΐζοιτο ἢ ληϊστὰς ὑποδέχοιτο εἰδὼς ἐκ γῆς $\mathbb{T}\mathbb{H}\mathbb{E}\mathbb{T}\mathbb{H}\mathbb{I}\mathbb{H}\mathbb{E}$: \mathbb{H} /// $\mathbb{A}\mathbb{L}\mathbb{A}\mathbb{T}\mathbb{H}\mathbb{E}$: $\Phi\mathbb{E}\mathbb{P}\mathbb{O}\mathbb{N}\mathbb{T}\mathbb{A}\mathbb{E}$: \mathbb{H} /// $\mathbb{A}\mathbb{K}\mathbb{O}\mathbb{N}$ βουλευοὶ περὶ \mathbb{T} . . (*I.G.A.* 497 B, 22, 23). For *epigraphic* purposes at least, this is but slender support to \mathbb{T} . The editor of the *I.G.A.* (Roehl)

⁴ For this sign with *another meaning*, note \mathbb{T} occurring on a group of four or five ostraka all temp. Domitian which Wilcken (*Ostraka* i. p. 96) thinks proceeded from one bureau. He notes that it occurs with proper names and may mean Πι(κῶς) a name which is common. Again

Grenfell, Hunt, and Smyly, *Tebtunis Papp.*, Pl. I., London 1902, note in index $\mathbb{T} = \pi(\acute{\eta}\chi\epsilon\iota\varsigma)$: (Pap. 5. 153).

⁵ The stone stands at present near the entrance to the Reading Room.

prints ΑΛΑΤΗΞ in fainter type, and certainly one editor gives in his facsimile a bold T where some would read the T.

The suggestion that we should read $\vartheta\alpha\lambda\alpha\tau\eta\varsigma = \vartheta\alpha\lambda\alpha\sigma\sigma\eta\varsigma$ belongs rather to the class of clever emendational conjectures—such as have so often been justified at a later time. If $\vartheta\alpha\lambda\alpha\tau\eta\varsigma$ is here to be read, it is important to note that there is another⁶ occurrence of the word in the inscription (A and B together, 40 lines) and there we have ΚΑΤ|ΑΘΑΛΑΞΞΑΝ. Whether this is to be taken to support the reading $\vartheta\alpha\lambda\alpha\sigma\sigma\eta\varsigma$, or as evidence against it, will depend upon one's point of view, and on that alone. It is worthy of remark that no other word containing ΣΣ or its equivalent occurs in the inscription. The date is put by Prof. Larfeld as ? 476 B.C.

Besides these two fifth century inscr. showing T there are the Mesambrian coins (from Mesambria, a Megarian colony on the Pontic) of the latter half of the fifth and the fourth century B.C. These read

META,
MEΞA,
MET } A(MBPIANQN).
Ξ }

The dialect of the place is Doric, but Ionic influence might reasonably be postulated; as also might intercourse between this Thracian colony and the Carian Halicarnassus where the above-mentioned inscriptions showing (?) T are found.

As these Mesambrian coins furnish the principal part of the evidence, it is necessary to examine them in detail. I have seen ten or twelve coins at the British Museum (and had the advantage of discussing them with Dr. Head and other gentlemen in the department) which exhibit the reading META or (between the spokes of a wheel)



in the clearest possible form. These coins are of the fifth, fourth, and third centuries B.C.—the proportion of uses of Σ or C instead of the older T increasing with time, until only Σ (or C) is used on imperial coins.

The Berlin catalogue exhibits (*Beschreibung der Antiken Münzen*, Bd. I.) about fifteen coins showing META on most of them in linear order, on three or four in wheel-arrangement.

There is no attempt to date, but a facsimile of a wheel-META is of exactly the same type as a B.M. coin, dated of the fourth century B.C. It is noteworthy that side by side with this coin the *Beschreibung* classifies a reading

⁶ There is a third in Roehl's reading of l. 15, but the letters are not legible in the inscr.

ΜΕΣΑ, so that it is likely that the two forms ΜΕΣΑ and ΜΕΤΑ can be found side by side in the whole period.

The shapes incline to π , three equal perpendiculars with cross-bar; on the line and of equal altitude with other letters.

Thus it appears that there are extant at least *twenty-five original occurrences in inscription or impression of T or π , contemporaneous within the limits 600–200 B.C., but representing only two small areas of provenance*, one in Thrace and one in Caria. Its sound-value is *either σ , or a local substitute for σ (perhaps a dental), or $\sigma\sigma$* . It occurs *in names only*, and one of these a quite foreign word,⁷ if not both.

The question of the exact sound-value must be regarded as undecided, but the following positions on both sides may be accepted:

For the value σ : (1) ΜΕΣΑ and ΜΕΤΑ are equivalent on the group of coins quoted, (2) the $\sigma\sigma$ -interpretation of the Halicarnassian group is poorly attested as compared with the ΜΕΣΑ-group, by about 4 instances to 25.

For the value $\sigma\sigma$: (1) $\mu\epsilon\sigma$ - alternates with $\mu\epsilon\sigma\sigma$ - (e.g. in the adjective $\mu\acute{\epsilon}\sigma\sigma\omicron\varsigma$), so that ΜΕΤΑ($\mu\beta\rho\iota\alpha$) may be a variant = $\mu\epsilon\sigma\sigma\alpha\mu\beta\rho\iota\alpha$, (2) $\Lambda\lambda\iota\kappa\alpha\rho\nu\alpha\tau(\acute{\epsilon}\omega)\nu$, $\Lambda\lambda\iota\kappa\alpha\rho\nu\alpha\sigma\sigma\acute{\epsilon}\omega\nu$ $\Theta\alpha\tau\acute{\alpha}\tau\iota\omicron\varsigma$, $\Pi\alpha\nu\nu\acute{\alpha}\tau\iota\omicron\varsigma$ are used in the same inscription: (3) these occur in separate words, which restores the balance as against ΜΕΤΑ, where only this one name can be adduced.

For the value τ : (1) Tau is a common Greek variant of Sigma. (2) There is nothing to deny the interpretations $\mu\epsilon\tau\alpha\mu\beta\rho\iota\alpha$,⁸ $\Theta\alpha\tau\alpha\tau\iota\omicron\varsigma$, etc. (3) The suggested reading $[\theta]\alpha\lambda\alpha[\tau]\eta\varsigma = \theta\alpha\lambda\alpha\sigma\sigma\eta\varsigma$ whose epigraphic slightness we have seen above, involves also a *philological* question. Why should not $[\theta]\alpha\lambda\alpha\tau\eta\varsigma$ be $[\theta]\alpha\lambda\alpha\tau\eta\varsigma$? For the occurrence of τ in Doric of the same region note $\Lambda\rho\tau\alpha\mu\acute{\iota}\tau\iota\omicron\varsigma$ Ahrens *Dial.* 2553. The point has been submitted to Prof. Conway, who kindly writes an opinion which favours Mr. Witton's view of a *dental* value for τ ; and with this opinion Prof. E. A. Gardner concurs; so that there is no improbability in this alternative explanation.

The various interpretations which give intermediate values such as *ts* have been discussed elsewhere, but there is a suggestion which would reconcile two minor facts which seems not yet to have been made. On the one hand, there is the fact that Byzantium, neighbour of Mesambria, used a (Corinthian?) form Υ or Γ as the first letter (on coins) of the name; and on the other, this curious τ on the Mesambrian coins; and it is an obvious inference that if Byzantium used something looking like a Pi for the corresponding voiced labial Beta, Mesambria may have had something looking like a Tau for a sound which, as many theories agree in maintaining, was probably partly made of, or was similar to, a dental sound. And local modification of sound-values,⁹ represented in a modified letter form, is not unknown to the numismatist. Prof. Gardner, however, thinks the

⁷ Prof. Percy Gardner argues for Mesembria as = Midday.

⁸ So Pape, *Wörterbuch*, s.v. $\mu\epsilon\sigma\eta\mu\beta\rho\iota\alpha$.

⁹ This Υ or Γ may be (Mr. Hill suggests)

analogy weakened by the fact that Byzantium was Megarian and so Γ is more naturally referable to Corinthian Δ.

What is the history of Mesembria,¹⁰ on the Pontine coast of Thrace, and on the slopes of the Haemus M., and in particular of its name? Strabo says (vii. 319) that it was a colony of the Megarians, and that it was formerly called *Μεγεβρία* (ὄλον *Μένα πόλις*); that the termination -bria is in the Thracian tongue 'a town,' in support of which he cites the names *Σηλυβρία*, *Πολτυοβρία*. We need not notice his derivation from *Μένα* nor that of Stephanus of Byzantium ἀπὸ *Μέλσου*, but the statement of the latter (whose native home by the way was not ten Roman miles from Mesembria) is interesting, viz. that the earlier *Μελσημβρία* . . . διὰ τὸ εὐφωνότερον λέγεται *Μεσημβρία*, because it goes along with the statement of Strabo to show that there was always something uncertain about the pronunciation of the third element in the word (later Σ and Τ); and that something suggested to a Greek *l* or *n* as part of the sound; and this is perhaps coming as near as local (mis?) pronunciation would permit to the native sound. These liquids are both *dental*, and so also is *t* which in shape Τ suggests.¹¹ Melsambria, Mensambria, Metsambria, Menambria, Mesambria are all nearer together in daily pronunciation than the eye will easily credit, and just such varieties of transliteration of native sound have always been given by geographers, in despair of deciding between the unconscious addition and peculiarities of dialects and individuals (cp. the historic dispute Peking v. Peking).

This, it may be replied, would certainly lead us to a local explanation of Τ, were it not for the Halicarnassian inscription with its 3 (or 4) occurrences of Τ. What had the two places in common, which might suggest a transference of the sign by ordinary intercourse? The answer is supplied by Strabo (*loc. cit.*) in the remark that Apollonia, just across the bay, was a colony of Miletus (*Μιλησίων ἄποικος*); as was also another town in the immediate neighbourhood, Odessus¹² (mod. Varna); and that the city of Istrus farther up the same coast was *Μιλησίων κτίσμα*. Even if direct intercourse cannot be postulated between the harbour of

an actual modification of π to represent the surd labial corresponding to Β; just as in Indian coins of Gondophares we get

ΓΟΝΔΟΦΕΡΡΟΥ
ΓΝΔΟΦΕΡΡΟ
ΥΝΔΟΦΕΡΡΟΥ

which seems equally to imply a palatalized form of Gamma (passing through the intermediate consonant-γ into the pure vocalic Υ sound, as in *gestern* = yesterday); and here too the modified Gamma Γ passing into Υ comes at last to take the place of a Upsilon, even in situations where there was never a

Gamma-value at all, that is it comes to be a new letter as in ΒΑΣΙΛΕΓC (*Βασιλεύς*) on coins of Kadphises II.

¹⁰ Strabo calls it *Μεσημβρία* (vii. 319), Herodotus *Μεσαμβρία* (iv. 93); and see (vii. 108) another town on the Aegean coast of Thrace.

¹¹ Pape (*Handwörterb. s.r.*) actually says: auf Münzen *Μεταμβριανοί*, but I think this is a misreading of ΜΕΤΑ for ΜΕΤΑ.

¹² ἐν τῷ μεταξὺ δὲ διαστήματι τῷ ἀπὸ Καλλάτιδος εἰς Ἀπολλωνίαν Βιζώνη τέ ἐστίν, ἥς κατεπόθη πολὺ μέρος ὑπὸ σεισμῶν, καὶ Κρουνοὶ καὶ Ὀδησσός, Μιλησίων ἄποικος, καὶ Ναύλοχος, *Μεσημβριανῶν πολίχνηον*.—Strab. vii. 319.

Mesembria itself and Miletus, in any case people in towns on the same coast and line of trade were going and coming. The support which the Halicarnassian inscription may have given to a theory of Phoenician or other Semitic origin for T rests on nothing now, not even the desperate challenge of a tenable alternative. Here we have one, far stronger than the Tsade theories which have been advanced (examined on p. 351 *et sqq.*).

In sum, the letter T appears on the coins of a Thracian town, which was in close association with neighbouring colonies of Miletus, in whose neighbourhood are found the only other occurrences of the letter. The evidence is somewhat in favour of an explanation of local Thracian origin and of transference by intercourse to Caria (and perhaps to the equally neighbouring Lydian Teos).

What reasons exist for the identification of the two foregoing forms?

The identification of the episemon T, T with the epigraphic sibilant (?) T now derives its chief support from the relation which existed between the districts of Miletus and of Mesembria, co-operating as it does with the arguments which have fixed on Miletus as the place where the Greek numeration-alphabet was invented, and so (presumably though not demonstrably) the birth-place of T, 900. See Kirchhoff, *Studien zur Geschichte des Griechischen Alphabets*. It is true that the Halicarnassian inscription is Doric, but Ionic influences have been shown to be at work.

The Achaean abecedarium from Metapontum, cited by Kirchhoff, has, if the tables in the *Handbuch* are correct, at the end of the row a sign +; while no M (=sibilant) appears. The Miletus numeral alphabet corresponds in arrangement with this, though the final sign is, according to the tables, possibly shaped T. But on examination Prof. E. A. Gardner observes that the tables are completed by Larfeld (and others) simply in deference to the theory, and that they consequently have no weight at all as evidence. We have here an instance of the *circulus in investigando* which has filled the handbooks with not a little useless *réchauffé*.

As, therefore, the Miletus numeration-alphabet does not, as it stands, conclude with T, we can only say that it is possible that the missing symbol was T and that possibly it was the same as the letter T of the Halicarnassian inscription.

What epigraphic or other evidence exists for the identification of m with M (Tsade)?

T the sibilant of the Halicarnassian (and ? Tean) inscription and of the Mesambrian coins was welcomed by Clermont-Ganneau and other authorities as a new link in the slender chain of epigraphic facts concerning

Tsade. This lead has been generally followed by the learned world¹³ so that T would be a variant of M, the presumptive Tsade of the Greek alphabet.

But a glance at the two forms is sufficient to ensure the postponement at least of any decision on the part of the trained epigraphist. Nothing that experience brings to mind suggests such a conversion as this presupposes. It involves a type T becoming, or being cognate with V; and though stranger things have been proved, yet it is only because they have been proved that they are accepted. Epigraphic probability is against it: there is no *prima facie* case. Moreover the first obvious consideration is unhelpful, viz. that if M and T are derived from or even cognate with \sim , then there must be some relation demonstrable between the forms. Now, M may conceivably have come from \sim , though not very obviously; but that a symmetrical form like T should come from such an asymmetrical form as \sim is universally (in all its variations) is hard to believe on the mere evidence of the forms.

What is wanted is full documentary evidence by which M can be traced in a number of intermediate steps to some ancestor of T. This is not forthcoming. The best thing which can be produced is an *analogous* instance of the development of the presumptive original \sim . This comes from the Sabaean and other monuments of Southern Arabia.¹⁴

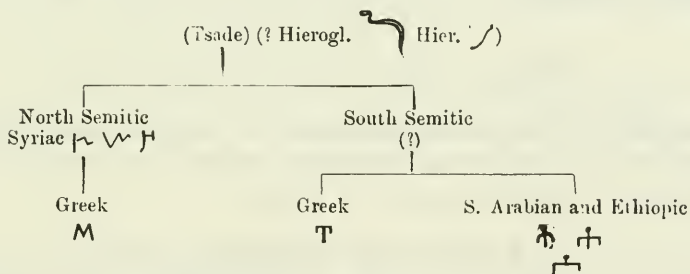
Here we have



These are probably of the sixth century B.C. or later, and in the Ethiopic Tsadai of the fourth century of our era we have



We should thus get, as a suggestion, a possible genealogical relation:



Winckler and others following him endeavoured a few years ago to prove great antiquity for the S. Arabian and in particular the Minaean inscriptions. Had this been established it would have been important in the $\mathbf{M}=\mathbf{T}$ or Tsade-question, because it would have given us a form of sibilant as old as the Meša-stone 𐤌 , and presenting the type 𐤌 which does show similarity epigraphically admissible to the \mathbf{T} sibilant.

The vigorous attack made on Winckler's theories¹⁵ by the experts of the Egyptian and Assyrian department of the British Museum¹⁶ have conclusively disproved¹⁷ the tempting assumptions therein made. It is clear that nothing can be maintained concerning a S. Arabian empire under Minaean kings, nor can the existing inscriptions be held to be older than the reign of Cambyses; they are perhaps of the fourth century B.C.

Had Winckler's contention for a very ancient date of the S. Arabian Sabaeen and Minaean inscriptions been maintained, these similarities would have had more significance. It would not have been impossible then to regard 𐤌 as a possible ancestor of \mathbf{T} , as it is now. We can only say that *if intermediate links could be found, the S. Semitic 𐤌 might prove to be a cognate of \mathbf{T} and so identify it through Tsade with \mathbf{m} .*¹⁸

What is the established place and value of \mathbf{M} , the old Greek sibilant, and its relation with a Greek numeration system?

It is an important fact that a letter (not Rho) is found in primitive Greek alphabets, in the eighteenth place, following Pi, where Rho now stands.

The abecedarium found at Formello, perhaps of the sixth century B.C., contains the following:

... $\text{⊙} \rho \mathbf{M} \eta \rho \zeta \tau \dots$

(values) ... $o \pi \mathbf{M} \eta \rho \sigma \tau \dots$

which corresponds, save for the presence of \mathbf{M} , with the modern Latin order o p q r s t , and omitting \mathbf{M} and η with the Greek order $\text{o} \pi \rho \sigma \tau$.

Next, the abecedarium from Veii reads

.. $\text{I K L } \text{w} \text{w} \text{⊞} \text{⊙} \rho \mathbf{M} \eta \rho \xi \tau \dots$

= $\iota \kappa \lambda \mu \nu \xi \text{o} \pi \mathbf{M} \eta \rho \sigma \tau \dots$

¹⁵ Followed by Dr. Glaser, and stated by Prof. Sayce: *The Higher Criticism and the Monuments*, Oxford, 1893.

¹⁶ See articles by Mr. R. C. Thompson, and Mr. H. R. Hall in *Nature*, Sept. 25, 1902, and June 26, 1902 respectively. Epitome of the results by Dr. Budge in his *Hist. of Egypt*, vol. vi. Intro.

¹⁷ They have not been answered, though Dr. Winckler dealt again with the matter in the *Hibbert Journal* in 1904.

¹⁸ In the Samaritan and Rabbiniq alphabets the form of capital 𐤌 is $\text{𐤌} (\text{𐤌}) = 90$. This is of course very remote from ancient Greek letter-forms; but it shows once more a striking analogy for the development of 𐤌 .

and those of Metapontum and Corinth (Roberts, i. p. 19) have no **M** in this place (between π and φ) but have it between Rho and Tau, in the usual place of Sigma.

The alphabet of an inscription found at Mantinea (Fongères, B. 16, 569 f. n. 1, Taf. 19, quoted in Bursian, *Supplbd.* 87, Larfeld's Art. p. 193) is as follows:

A C Δ E, F Θ I K Λ Ν Ο . .
Γ ∨ R ξ Τ υ ϖ √ X

But the sign between Γ and R, Larfeld says (*loc. cit.*), is 'ssade = ss.' He adds that \vee is the sign already known¹⁹ as Ssade in the abecedarium of Caere.²⁰

Thus it appears that between Pi and Rho there was originally a place reserved for a letter which cannot be identified with any form of Sigma, but which has a sibilant or partly-sibilant value.

Side by side with this fact stands another, that Σ is eighteenth in the Hebrew alphabet— Σ being the letter correspondent to the Meša inscription 𐤎 —and there holds the numerical value which the missing **M** would have had in the Greek alphabetic notation (a value taken by the next in order, viz. φ).

The Hebrew records do not ascend higher than the second century B.C., while the Greek abecedaria must have an antiquity sufficient to account for their being unfamiliar to the inventors of the Greek system—placed by one theory as far back as 800 B.C. and by none later than 450 B.C.

Still it is almost on these facts alone that the theory rests that 𐤎 , Tsade, may be assigned a definite place in 'Phoenician'-Semitic alphabets; and that **M** is in any case to be associated with the value 900. This is a small enough basis for a theory which exists chiefly because of the natural antipathy to leave **T** = 900 unexplained.²¹

Is the last too bold an assertion? It can be defended.

For what other reason has Tsade, as such, ever been associated with the Greek alphabet numeration? It cannot be answered that Tsade was the only missing letter required to complete the parallel with the Hebrew or

¹⁹ 'Aus der Alphabetreihe von Cäre (vgl. meine Griech. Epigraphik S. 505) bekannten Zeichen für Ssade.'

²⁰ Deecke says (Bursian, *Jahresb. Supplbd.* 87 p. 27): Das pränestinische Σ ist auch venetisch, kampanisch, Sabellisch = kapenatisch Σ , eine Art s (etwa ss? s. etr. *anaśses*).

But this seems rather to be ξ , cp. the old Italian inscription in the Necropolis of Este (near Venice): a, e, v, z, h = 𐌌 i, k, l, m, n, s = 𐌊 d, o, p, \acute{s} , r, s, t, u, ϕ , x. Bursian,

ibid. p. 121 (C. Pauli, *Altitalische Forschungen* iii. 'Die Veneter und ihre Schriftdenkmäler, Leipzig, 1891, p. 186).

²¹ The oft-quoted saying of Herodotus i. 139 has been, oddly enough, brought in to support various Tsade theories; whereas it plainly says that San and Sigma are equivalents, and this agrees with the facts which directly associate Sigma with *Shin*. Why not then accept this plainer meaning? San is very improbably Tsade, while it most probably is *Shin*.

other Semitic alphabets. No, for T (=900) does not occur in that part of the numeration alphabet: it comes if at all among the supplementary signs $\mathsf{Y} \phi \mathsf{X} \Psi \Omega$, and it must come, even then, after the last of them, for the Milesian numeration alphabet could have had it in that place only, and that only on the assumption of a missing sign. It cannot be urged that it is more scientific to discover an older letter in a new form than to have recourse to the theory of an arbitrary invention; for the only safe suggestion concerning $\phi \mathsf{X} \Psi$ at least is that they are such inventions—and why not T too?

It cannot be urged on the ground that T bears a striking resemblance to T the sibilant; for $\mathsf{X} = \mathsf{x}$, or χ bears an equal resemblance to the form of Semitic Tau, for instance. On the other hand, the absence of the sibilant from the eighteenth place certainly does not *suggest* its re-appearance after Omega; for, *prima facie* why should the antiquarian knowledge of the inventors have just sufficed them to recall the sibilant and yet not have gone far enough to give it its right place, according to the abecedaria, seeing especially that it did suffice to give both Qoppa and Waw their own places (and the Hebrew values)?

The meagre conclusion is that M is the letter which corresponds to Tsade, and that it is not yet to be identified with the rare T .

It may be necessary to reply to the challenge to account for M and T as rival forms of the sibilant=Tsade. This is not difficult, if we abide by the proved facts. M has overwhelming claim to stand as the accepted candidate for the position. Its areas of provenance are shown even by any table of Greek letter forms to be *twenty times* as numerous as those of T ; while in the number of its individual occurrences in Greek inscriptions M must outnumber T by many hundreds. It is only the difficulty of accounting for the sibilant T (supposing always that it is a sibilant= $\sigma\sigma$ and not a variant of a corresponding dental, and so perhaps a variant of $\mathsf{T} = \tau$) which has led to its being seriously brought forward as derived from Tsade. For myself, I have never seen the need to doubt the well-known statement of Herodotus that *San*=Sigma, or to suppose that *San* is Tsade. It does not come within the scope of this investigation to consider the very large question of the inter-relations of Sigma, *San*, Tsade, and Shin; but it is quite obvious that if *San*=Sigma be left alone as representing Semitic *Shin*; then M is naturally Tsade; and T is nowhere. It would be a very great relief from many complications if T had not to be considered, and on the residuum of actual proof it has no claim at all to consideration side by side with Σ and M , which are, what T is not yet shown to be, Greek letters in common use.

*Is it proved that the Phoenician²² was the Semitic alphabet adopted in Hellas?
And how does this affect the conclusion Μ = |~? And what of m?*

The net result of combined historical and epigraphic research seems to be this:

- (1) Tradition speaks plainly, though not exclusively, of the Phoenicians as the givers of the alphabet.
- (2) Popular current opinion believed in Φοινικία.
- (3) Old Canaanitish and old Hebrew inscriptions use alphabets showing close affinity with the Greek.
- (4) The evidence of Greek inscriptions points in some cases clearly toward Phoenician types.

The nature of this affinity is far from proved. The ancient belief in direct descent is much weakened in modern days. Even a cognate relation is denied by some theories. At most a common Semitic origin may be postulated for Hebrew, Moabite, and Greek.

A really judicial estimate is rendered difficult by the unconscious prejudices which prevail: one of these is the assumption that a language whose signs can be found to fit into the Greek alphabetic order must also have used the same alphabet; whereas it may very well be the case that the two sets are only similar because the sounds were similar, especially when, as in the present case, an alphabet exists on one side only, and the application of the signs from the other side thereto shows very considerable discrepancies and lacunae which cannot be accounted for.²³

The residuum here is given by Larfeld when he says²⁴ (*Handbuch*, p. 495): *the Phoenico-Hebraico-Greek alphabet (sounds and signs) which from Semitic lands spread into all the peoples of our civilization, the turning-point in whose culture-history is marked by its arrival, is to be traced back to one*

²² The statement that 'the Phoenicians' invented our alphabet is inexact. Phoenician is, according to Kautsch's *Gesenius' Hebrew Grammar*, strictly only a branch of the Middle Semitic or Canaanitish, which itself is only one of three great branches using this alphabet. Similarly vague is the statement that the Greek alphabet is derived from 'the Phoenician' (see for example Kirchhoff *Stud. zur Gesch. des Gr. Alphab.* 1887, p. 168). Perhaps even the Greek signs go back to others 'in some respect earlier in form . . . than any extant monument' (E. A. Gardner, *The Early Ionic Alphabet*, 1886, p. 15; and see *passim* for uses of the term).

²³ The Hebrew names are not necessarily the Semitic names any more than the numerical values are Semitic. A *petitio principii* seems to me to lie in the repeated argument one meets from the *place of Tsade* and other letters. There is no 'place' of a *missing* Greek letter known, except by the assumption that the Hebrew alphabet order was also the Semitic. Once gain the point that |~ was eighteenth in an assumed Semitic alphabet, such as Phoenician or that of the Moabite stone, and one has immediately a (perhaps false) premise for many deductions about Μ in Greek.

²⁴ Quoting from Henrich's *Gr. Epigr.* pp. 361-375.

time and to one home, which, wherever it may be found to lie, is near Egypt.²⁵

The epigraphic facts for this conclusion are incontestable :

- (1) The Meša-inscription (ninth century) from Moab can be read by the help of the Greek (? ninth century) and the Hebrew alphabets (Siloam inser. ninth century; coins from second century B.C. See n. 29).
- (2) The tables of alphabets from all Semitic lands show unmistakeable parallels. See P. Berger, *Hist. de l'Écriture dans l'Antiquité*, 1891; I. Taylor, *The Alphabet*.

But the statement does not hold good of every particular case; some letters are quite unexplained, may be non-Semitic, or may be inventions.

What then of M? Is it identical with the Semitic ṣ?

The conspectus subjoined of the forms of ṣ in Semitic lands shows how reasonable is the view that the letter which became ṣ in the Semitic became M in the Greek alphabet.

Nothing more can be said, as the forms nowhere give M and no intermediate links are found.

As nothing but ocular demonstration can be convincing here, and that only if extended over a large field, I here present a conspectus of all those forms which are assigned by authorities in oriental and general alphabetology to the representatives of the Hebrew **צ**, Tsade, or the Phoenician ṣ. This letter appears throughout to be of one type, viz. a composite letter made of a vertical²⁶ with a hook of some sort on the right-hand side (only). See for instance Lidzbarski's tables in the *Ephemeris für Semitische Epigraphik* i/ii, 1901, where he studies the character in old, middle, and new Phoenician, in Aramaean, Nabataean, Palmyrene, square Hebrew, and other groups, and finds it always of this type.

P. Berger in his *Hist. de l'Écriture dans l'Antiq.* 1891, gives a complete conspectus of alphabets in which the forms of Ssade are given as under :

In South Semitic Alphabets.

| | |
|-----------|-------|
| Himyarite | ⊞ 𐩦 |
| Ethiopian | ^ x |
| Ghez | ˆ |
| Safa | } |
| Berber | ⌘ Ⓞ 8 |

²⁵ Every year brings fresh confirmation. See article on 'Archaeological discoveries in Crete and Egypt,' *Nature*, July 9th, 1903.

²⁶ In some forms this first stroke inclines considerably.

In Aramaean Alphabets.

| | |
|---------------|-------|
| Archaic | 𐤀 |
| Papyrus | 𐤁 |
| Square Hebrew | א |
| Palmyrene | 𐤅 |
| Nabataean | 𐤆 |
| Estranghelo | ܐ |
| Syriac | ܐ |
| Others | 𐤇 𐤈 𐤉 |

In Hebrew Alphabets.

| | |
|--|---|
| Mesa (900 B.C.) | א |
| Siloam (700 B.C.) | א |
| Temple coins | א |
| Samaritan (developed about third century A.D.) | ⴌ |
| Hebrew | א |

In Phoenician Alphabets.

| | |
|------------|-----|
| Archaic | 𐤀 𐤁 |
| Sidonian | 𐤁 |
| Punic | 𐤅 𐤆 |
| Transition | א |
| Neo-Punic | 𐤅 |
| Hebrew | א |

These lists are incomplete as to variety of forms shown, but they serve for a first glance which shows us that while they generally justify belief in $\mathbf{M} = \text{א}$, only in South Semitic alphabets do we find any development analogous with such a form as \mathbf{T} . The Samaritan of course would be very analogous, but its late date makes it useless in the present comparison.

As I have maintained on another page, Sabaean and other Arabian alphabets are extant only in monuments for which a date sufficiently early for our purpose cannot be claimed; so that unfortunately nothing is at present to be inferred from the apparent analogy to which I point between \mathbf{T} and S. Arabian forms of Tsade. The contrast, however, between this analogy here and the total absence of any suggestion of analogy in the North Semitic forms is so striking that it deserves to be well established for so much as it may be worth at least. And Lidzbarski gives (*Ephemeris für Semitische Epigraphik*, vol. ii. pt. i. 1903) this large collection of the Arabian forms :

| | |
|---|---|
| 𐩀 | 𐩁 𐩂 𐩃 𐩄 (Sabaean) |
| 𐩅 | 𐩆 𐩇 𐩈 𐩉 𐩊 𐩋 |
| 𐩌 | 𐩍 𐩎 𐩏 𐩐 𐩑 𐩒 |
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Curiously enough, a sign which does really resemble \mathfrak{D} or \mathfrak{T} is the letter \mathfrak{N} (η) which appears as \mathfrak{N} and \mathfrak{D} (often)!

Still the Sabaeen \mathfrak{Z} is not very divergent, and this makes more remarkable the total divergence of the North Semitic forms, which Lidzbarski gives in the full tables in the companion volume to *Die Schrift der Nord-Semitischen Inschriften* in the *Handbuch der Nord-Semitischen Epigraphik* for 1898 as under:

Phoenician.

𐤀 𐤁 𐤂 𐤃 𐤄 𐤅 𐤆 𐤇 𐤈 𐤉 𐤊 𐤋 𐤌 𐤍 𐤎 𐤏 𐤐 𐤑 𐤒 𐤓 𐤔 𐤕 𐤖 𐤗 𐤘 𐤙 𐤚 𐤛 𐤜 𐤝 𐤞 𐤟 𐤠 𐤡 𐤢 𐤣 𐤤 𐤥 𐤦 𐤧 𐤨 𐤩 𐤪 𐤫 𐤬 𐤭 𐤮 𐤯 𐤰 𐤱 𐤲 𐤳 𐤴 𐤵 𐤶 𐤷 𐤸 𐤹 𐤺 𐤻 𐤼 𐤽 𐤾 𐤿

𐤀 𐤁 𐤂 𐤃 𐤄 𐤅 𐤆 𐤇 𐤈 𐤉 𐤊 𐤋 𐤌 𐤍 𐤎 𐤏 𐤐 𐤑 𐤒 𐤓 𐤔 𐤕 𐤖 𐤗 𐤘 𐤙 𐤚 𐤛 𐤜 𐤝 𐤞 𐤟 𐤠 𐤡 𐤢 𐤣 𐤤 𐤥 𐤦 𐤧 𐤨 𐤩 𐤪 𐤫 𐤬 𐤭 𐤮 𐤯 𐤰 𐤱 𐤲 𐤳 𐤴 𐤵 𐤶 𐤷 𐤸 𐤹 𐤺 𐤻 𐤼 𐤽 𐤾 𐤿

Aramaean.

𐤀 𐤁 𐤂 𐤃 𐤄 𐤅 𐤆 𐤇 𐤈 𐤉 𐤊 𐤋 𐤌 𐤍 𐤎 𐤏 𐤐 𐤑 𐤒 𐤓 𐤔 𐤕 𐤖 𐤗 𐤘 𐤙 𐤚 𐤛 𐤜 𐤝 𐤞 𐤟 𐤠 𐤡 𐤢 𐤣 𐤤 𐤥 𐤦 𐤧 𐤨 𐤩 𐤪 𐤫 𐤬 𐤭 𐤮 𐤯 𐤰 𐤱 𐤲 𐤳 𐤴 𐤵 𐤶 𐤷 𐤸 𐤹 𐤺 𐤻 𐤼 𐤽 𐤾 𐤿

Square Hebrew.

א ב ג ד ה ו ז ח ט י כ ל מ נ ס ע פ צ ק ר ש ת

Old Hebrew and Samaritan.

א ב ג ד ה ו ז ח ט י כ ל מ נ ס ע פ צ ק ר ש ת

(The last is of the sixth century A.D.)

It will immediately be noted that the North Arabian forms diverge markedly from the Sabaeen and others of South Arabia. Lidzbarski in the *Ephemeris* (*loc. cit.*) p. 33 protests rightly against the attempt to identify the two types \mathfrak{H} and \mathfrak{B} , misplaced ingenuity having led some one to argue for \mathfrak{X} as intermediate between the two!!

North Semitic and North Arabian forms being equally impossible as ancestors of \mathfrak{T} , there remains only the supposition that the Sabaeen \mathfrak{H} , in one remote corner of the Semitic world, was a local form, as \mathfrak{m} was in another.

What is the historical relation between the Greek alphabetic numeration system and the parallel Hebrew system?

Whatever may be the ultimate conclusion of archaeology concerning the relation between the Greek alphabet and the Phoenician, this question only indirectly affects the question of the numerical system. For the Phoenician numeration of the monuments is quite different, non-alphabetic, and only

resembles Greek, Egyptian, Latin, and other systems in inclining generally to the decimal²⁷ basis. The Phoenician system which we know is the ancestor neither of the later Greek nor of the later Hebrew systems.

I have collected from the *Corpus Inscriptionum Semiticarum* and elsewhere a number of illustrations (of which the following may be mentioned) to satisfy myself that the Phoenician system was really different *C.I.S.* i. p. 31 n.; 165 Tab. xxxvii. l. 6; i. Nos. 7, 10, 11, 12, 21 (Tabb. iii, v, xi, v, vii, resp.). They are of the third or fourth century B.C. and are sufficient to show that the scheme was this :

$$\begin{array}{l} \text{I, II} \dots \text{III III III} = 1, 2, \dots 9 \\ \text{—} \dots \text{III III III—} = 10 \dots 19 \\ \text{~} \dots \text{~ ~ ~ ~ ~} = 20 \dots 80^{28} \\ \text{III III III—~ ~ ~ ~ ~} \text{ (i.e. } 9+10+20+20+20+20) = 99. \end{array}$$

And this is sufficiently inconsistent with any Latin or Greek system to make any relation improbable.

On the other hand the Hebrew numeration system is, for the first seventeen letters at least, strictly parallel, and for the remaining five (of the Hebrew) differing by one place only; and it is a commonplace of the Hebrew grammars that this was the (later) method of numbering in antiquity. This system was as follows :

| | | | | | |
|---|-------|----|---------|-----|---|
| 1 | א (α) | 10 | י (ι) | 100 | ק (ϙ) |
| 2 | ב (β) | 20 | כ (κ) | 200 | ר (ρ) |
| 3 | ג (γ) | 30 | ל (λ) | 300 | ש (σ) |
| 4 | ד (δ) | 40 | מ (μ) | 400 | ת (τ) |
| 5 | ה (ε) | 50 | נ (ν) | 500 | } made up by combining the foregoing. |
| 6 | ו (Ϝ) | 60 | ס (ξ) | 600 | |
| 7 | ז (ζ) | 70 | ע (ο) | 700 | |
| 8 | ח (η) | 80 | פ (π) | 800 | |
| 9 | ט (θ) | 90 | צ (? M) | 900 | |

But what is the meaning and value of the parallel? The statement that this was the later system refers to the notation used in the inscriptions and MSS in the ordinary Hebrew square character. Now the upward limit of the sources for this character is not earlier than the beginning of the second century B.C., only rare instances carrying us into the prae-Christian era. An inscription of 176 B.C. is mentioned by Kautzsch in *Gesenius' Hebrew Gram.* (1898) p. 24 as one of the earliest. I subjoin a note²⁹ from the latest edition which embodies perhaps the most current opinion in oriental circles.

²⁷ Bursian, *Jahresb. Supplbd.* 87.

²⁸ ק = 100 is doubtful.

²⁹ To this effect: that both the order and names of the letters, together with their numerical values have passed over from the Phoenicians to the Greeks in whose language the letters A—T are borrowed from the old

Semitic; so also Old Italic Alphabets. That in default of special arithmetical figures the consonants were also used as numerical signs. The earliest traces of this usage are, however, first found on the Maccabean coins [i.e. of John Hyrcanus and his successors, from 135 B.C.].

But I note that this is no more than judgment

The matter then stands thus: neither the Greek nor the (nearly) parallel Hebrew system was the same as the Phoenician; there is no proof of the employment of the Hebrew before the middle of the second century B.C. at the very earliest, so that the Hebrew may quite possibly have been an adaptation of the current Greek system to the existing Hebrew alphabet.

What is the point of agreement yet reached by Oriental Scholars as to the affinity between the Semitic and the Egyptian alphabets?

M. Lidzbarski writing in 1901 on *Der Ursprung der nord- und südsemitischen Schrift* (in *Ephemeris für Semitische Epigraphik*) expresses the opinion that the Phoenician alphabet was an imitation of the Egyptian, the invention of a man of Canaan, who knew of the existence of the Egyptian writing, but who did not know sufficient to copy it directly, and was driven to rely upon his memory and his inventiveness. But, as he urges in another place, *Die Schrift der nordsemitischen Inschriften in Handbuch der nordsemitischen Epigraphik* 1898, the mere fact of similarity between the Phoenician and the Mesopotamian, or between the Phoenician and the Egyptian alphabet systems is quite insufficient ground for arguments as to origin. And as for hypothetical sources these are many (see e.g. A. J. Evans *Prim. Pictographs and a prae-Phoenician script from Crete and the Peloponnesus* in *J.H.S.* xiv. p. 270 ff.). Delitzsch's attempt to establish by new arguments (published in 1897) a Babylonian origin is, in Lidzbarski's opinion, as abortive as the rest.

In 1902 the Council of the Society of Biblical Archaeology asked the leading Egyptologists of England and America for their opinion on this question of affinity between the Egyptian and Semitic languages. The result was the collection of the most varied opinions which may be thus classified:

- (1) that there is the closest affinity
- (2) that there is no affinity
- (3) that there is derivation of alphabetic forms without affinity between the languages
- (4) that there were many borrowings without any affinity.

by default, there being very little of Old Hebrew at all. The remains are, in fact:

- (1) The Meša stone, 9th B.C.
- (2) The Siloam-inscription, perhaps 8th B.C.
- (3) Twenty seal-stones, some pre-exilic but bearing little except proper names.
- (4) The Maccabean coins, late 2nd B.C.

Dr. Lionel Barnett of the Oriental Department of the British Museum kindly remitted

to me in 1903 the following statement which may be taken as the view at present accredited: 'As the Greeks received the Semitic alphabet, already in a fixed order, and are found already using it for numerical purposes at least by 800 B.C. it is probable that the Semites also used it numerically before them.' As this contribution strives to show, every one of these statements is at present hypothetical.

The conclusion may be said to be that while there is sufficient resemblance to justify a suggestion of affinity, *affinity is not proved*, and direct descent (of Phœnician from Egyptian) is maintainable as a hypothesis only for the alphabetic *forms*, if at all.

Upon what is based the explanation of the complementary letters of the Greek alphabet, and of the adoption of Τ = Tsade to complete the list for the purposes of numeration?

Kirchhoff declared in 1877, in the preface to the third edition of his studies on the history of the Greek alphabet, that the time had not yet come³⁰ for the writing of such a history. The excavations and labours of the thirty years which have passed since that utterance have brought us not much nearer to the necessary material.

The arrangement of the alphabet for purposes of numeration was made after the inclusion of Υ Φ Χ Ψ Ω, for these all receive numerical values. Before therefore it can be asserted that the sixth 'complementary' was added in such and such a way, it is necessary to know what the foregoing five themselves were.

What is *known*³¹ of Υ Φ Χ Ψ Ω?

First that they occur all together, or with one omission, in a few groups of the seventh, sixth, and fifth centuries B.C. using alphabets of Asia Minor, viz.:

- (1) in the Naukratis group³² (650-520 B.C.) with four clear and three doubtful instances of Φ; seven good instances of Χ, and a large number of omegas.

³⁰ Lenormant died without having had the assistance of some monuments which have since made possible such advance as has been made; so that his conclusions must reluctantly be put aside as out of date. The Meša stone is not considered in his article on the origin and formation of the Greek alphabet, in 1873. This was discovered by Clermont-Ganneau in 1870 and published by him in 1873 in the *Revue Archéologique*.

³¹ Apart from this, much value in an investigation so intricate must be attached to sound theory, so that a brief bibliography of the topic for the last twenty years may be welcome:

Wilamowitz-Moellendorff, *Homerische Untersuchungen*, pp. 288 ff. 1884.

E. A. Gardner, 'The Early Ionic Alphabet,' *J.H.S.* 1886.

Kirchhoff, *Studien zur Geschichte des Griechischen Alph.* 1887.

E. Szanto, 'Zur Gesch. des griech. Alph.' in the *Mittheilungen* (Athens), 1890.

E. Kalinka, 'Eine Boiotische Alphabetvase,' in *Ath. Mitth.* 1892.

W. Larfeld, in section Greek Epigr. of Von Müller's *Handbuch*, 1891.

W. Schmid, 'Zur. Gesch. d. griech. Alph.' in *Philologus*, 1893.

P. Kretschmer, 'Die Sekundären Zeichen des griech. Alph.' in *Ath. Mitth.* 1896.

M. L. Earle, 'Supplementary signs of the Gk. Alph.' in *Am. J. Arch.* 1903.

The last named reviews all the foregoing and adds his own views. He makes a valuable classical reference to Aristotle *Metaph.* 1093 a with Syrianus, *Schol. Arist. Metaph.* p. 940b (the arguments of Archinus in commending to the Athenians the introduction of the Ionic alphabet).

³² E. A. Gardner, *Inscriptions from Naukratis*, 1884-5.

- (2) in the Teos inscr. seventh B.C.
- (3) in the Abu-Simbel inscr.
- (4) in the sixth century Amorgos inscr.
- (5) in the fifth or sixth century Halicarnassus inscr. (here also *perhaps* $\tau = \sigma\sigma$).
- (6) in a fifth century inscr. of Tarentum.

If we count all the inscriptions of the seventh, sixth, and fifth centuries which have Ω , though not all the other four at the same time (several omit one only), we then can add ten inscriptions from Asia Minor, eight from the westerly isles of the Aegean, and a sixth century inscription from Laconia. Other inscriptions corroborate, though they omit Ω . It can thus be said that more than twenty-three inscriptions prove the existence of Υ , Φ , χ , Ψ , Ω in the Greek alphabet between 650 B.C. and 450 B.C., two of these (not the oldest) having also τ .³³

Now Kirchhoff has maintained that the alphabetic notation involving the completion of the alphabet was in use at latest in 800 B.C., and that this was first in Miletus, but the arguments of B. Keil (in *Hermes*, vol. 29, pp. 248-280) in favour of a later date (550-425 B.C.) and a Dorian origin in Halicarnassus are weighty enough to prevent the statement that the earlier date is proved. It is only fair to say that Kirchhoff's authority is very high and this date has been passed with universal consent. I can only say that I cannot find the proof of it on epigraphic facts of independent reliability.

From the datum above emphasized, which is the only indisputable epigraphic fact concerning the origin of these letters as a group, the discussion has proceeded in a very earnest manner to the explanation of their origin and entrance into the Greek alphabet.

In the *Revue Archéologique*, 1884, B. Haussoullier re-publishes the conclusions of the discoverer of the Meša stone, Clermont-Ganneau, concerning the complementary characters of the Greek alphabet, $\Upsilon \Phi \chi \Psi \Omega$.³⁴ M. Haussoullier there makes this remark: 'il faut s'habituer à les considérer [the epigraphic forms] sous toutes leurs faces, à les décomposer, tourner et retourner (comme faisaient les anciens eux-mêmes, les Argiens par exemple qui couchaient la H au lieu de la laisser droit E).' This observation is fundamentally unsound and misleading.

It is not true in general that one letter was made out of another in the old alphabets by simply turning it on its side or inverting it. Alterations of position do occur, but either the change is made very gradually and unconsciously; or else the apparent inversion is the result of some external cause, e.g. when the direction of the writing is altered, the letters all turn round. In particular, M. Haussoullier here chooses an unfortunate illustration, for H

³³ If we accept $[\text{S}] \alpha \lambda \alpha \tau \eta \varsigma$ (see above).

Mélanges Graux, Paris, 1884, pp. 415-460.

³⁴ Originally put by Clermont-Ganneau in

is not necessarily Ξ turned over, since a more complex form existed, viz. \boxplus (in the three Etruscan abecedaria),³⁵ which suggests equally well \boxminus and Ξ .

The results of Clermont-Ganneau's attempts to explain $\Upsilon \phi X \Psi \Omega$ are simply these: that (he suggests) Υ preserving the Semitic form was relegated to the end of the alphabet, F (=E docked of one cross-bar) taking its place above; that Ψ was made by lengthening the vertical stroke of Υ ; that ϕ (=phi) is simply a new application of Φ (=Qoppa); similarly that X is another application of the Semitic X =tau; that Ω is the Phoenician O left open³⁶; that the whole of this was done upon two principles (1) contiguity, (2) antiquity of the adopted form, i.e. the neighbouring letters were chosen, and of them the oldest forms then known.

In this brief form the statements, I fear, are not very clear, and do not treat quite fairly the very careful consideration which Clermont-Ganneau gave to the complexity of the problem. For suggestiveness and ingenuity these explanations are as good as any. They are quoted as an example of the stage at which the investigation stands in numberless paragraphs and articles which have been devoted to the subject.

Not one of these explanations can be proved, and competing theories have quite as good a right to consideration, as for example Deecke's, which would refer the whole group to the Cypriote syllabaria. The newer explanations have the advantage of making use of the later discoveries, as for instance this Cypriote origin uses the excavations of Prof. Flinders Petrie at Naukratis, an Egyptian colony of Miletus. While a question is still open, it is important to bring into the field of discussion every possible theory for which a good case can be made out.

Nothing useful has been added to the careful and very full summary which Larfeld gives in Müller's *Handbuch*, pp. 515-521, and the net result is that *the group $\Upsilon \phi X \Psi \Omega$ is probably an adaptation made by the Greeks themselves of some signs of unknown origin as an addition to the Semitic alphabet which they first used.*

Such being the uncertainty which covers the question of $\Upsilon \phi X \Psi \Omega$, themselves well attested letters, what profitable argument can be maintained concerning the origin of T , which does not occur in any list of numerals containing the supplementary signs?

There is, therefore, no direct evidence, epigraphic or other, of the inclusion of a sign for 900 of the shape T , with the supplementary signs of the Greek alphabet used for numerical purposes: that it belongs to them is an *inference* from the later use of T =900, and from the fact that one more sign would have completed the supplementary list for this special purpose.

The utmost that can be proved then is that for 900 *the Greeks apparently adopted a form T which was also, in a restricted employment,*³⁷ *used as a sibilant letter \bar{T} .* The principal arguments are summarized under the next head.

³⁵ See Müller's *Handbuch*, vol. i. pp. 505-511.

did not pass into Greek.

³⁶ Sadé he does not explain, as perhaps it

³⁷ As shown above, pp. 344 f.

What is the present state of learned opinion pointing to the supposed selection, by the inventor of the Greek numeration-alphabet, of the letter T, to stand as the sign required for 900? And how is the Hebrew divergence³⁸ in the order of the numerals at this point to be explained?

Larfeld's conclusion (*Griech. Epigr.* p. 544) against Keil's (*Hermes* vol. 29, pp. 249 ff.) places the birthplace of the Greek alphabet-notation at Ionian Miletus, not later than 800 B.C. Keil holds that the birthplace was in the Dorian Caria, probably the town of Halicarnassus, at a date not later than 450 B.C., and not earlier than a century before that date.

Larfeld's arguments which summarize the opinions of scholars may be condensed as follows, as regards Tsade in particular.

The Milesian alphabet in the ninth century B.C. contained 26 letters in the following order:

$\alpha \beta \gamma \delta \epsilon \zeta \eta \theta$
 $\iota \kappa \lambda \mu \nu \xi \omicron \pi \varrho$
 $\rho \sigma \tau \upsilon \phi \chi \psi \omega.$

An addition of one more made possible an arrangement into three groups of nine each, which then could be systematically employed on a decimal principle, viz.:

$\alpha \beta \dots \theta = 1, 2 \dots \dots \dots 9$
 $\iota \kappa \dots \varrho = 10, 20 \dots \dots \dots 90$
 $\rho \sigma \dots \Upsilon = 100, 200 \dots \dots 900.$

Now it happened (so the argument runs) that just recently—as the Naukratis inscription of 650 which uses only $\xi\xi = \sigma\sigma$ shows—the Greek alphabet had dropped $\Upsilon = \sigma\sigma$ from its place, viz. 18th, so that it was chosen for the sign, being placed at the end of the line, with the value 900. In pages 149 *sqq.* Larfeld thoroughly considers the subordinate questions suggested by the retention of Vau and Qoppa in their own place, as against the displacement of Υ (Tsade³⁹); and rejects (p. 150) the obvious objection that Υ may not be Tsade at all, but a sign invented or borrowed from a neighbouring barbaric alphabet; as for instance the suggestion that all the complementary letters were borrowed from the Cypriote syllabaries (E. A. Gardner, *J.H.S.* vii. (1886), pp. 223 *sq.*, developing the hypothesis of Deecke). Larfeld points out what has been urged as to the bearings of the three abecedaria (Chalcidian of the Campagna⁴⁰) found at Veii Caere and Sena (p. 505) and considers it highly improbable that they could have been alphabets in actual use at the time—antiquities then! The subsequent history of the alphabet-notation of Miletus he thinks followed that of

³⁸ In the Hebrew order $\Upsilon = 90$.

³⁹ Tsade, Larfeld says, p. 149, was a living letter in Corinth still in the sixth century, at Melos in the second half of the sixth, and at

Sikyon even in the fifth.

⁴⁰ So Kirchhoff, *Stud. z. G. d. g. A.* pp. 134 *sq.*

the alphabet of sound-representing letters, gradually spreading through Ionic lands, and slowly, after centuries of strife with the current alphabets, also through the rest of the Greek world—even in conservative Athens, being received in 403 B.C.—and at last, as the Milesian alphabet displaced the other surviving alphabets, the numeration system triumphed with it over all the Greek world, at about the close of the pre-Christian era.

This is no doubt an unprejudiced summary of the main balance of the arguments for the inclusion of T among the numerals. But it is evident from the non-agreement concerning the essential particulars (the actual elements of the Milesian sound-alphabet, the date and birthplace of the numeration system, the origin of the complementary characters) that the summary embodies nothing more than the expectations of trained minds, perfectly acquainted with the fields of archaeology in which these questions lie. This is much. The regrettable circumstance is that by constant re-statement these theories of general soundness have been taken as proved in detail.

The knowledge based upon epigraphic and historical facts is limited to this: *the most complete numeration-alphabet existing in the remoter centuries comes from Miletus; it has not the sign for 900 T which is found in papyri with that value; there is a rare sibilant (?) T whose shape is identical with that of the episemon T=Ɑ.*

There are a few minor facts which are at least very curious. One such is that the Arabic kha=600 (?=X χ) and Arabic za=900 (? Sade).

But, as Lidzbarski⁴¹ remarks, this is like bringing Ἀπόλλων into comparison with Napoleon.

Coptic has taken since the Christian era the numeral Sampi in the form ϣ, value sh, = 900 (Tattam *Egyptian gram.* 1865).

Of much more weight than either of these is the fact that the Hebrew alphabetic numeration is exactly parallel with the Greek for the first seventeen characters, i.e. to the letter preceding y and the missing M ; and that after this point is passed the Hebrew values are each one step removed below the Greek values, the difference being due to the presence or absence of y in the two systems respectively.

It is impossible to omit an enquiry into the meaning of this singular divergence. The simplest explanation is that the Greek lost M while the Hebrew retained y ; so that when the Hebrew adopted or imitated the existing Greek system (there is no inscription with these numbers in Hebrew before the Hyrcanus coins of 135 B.C.) it inevitably departed from its model at this point. If this is true—and there is nothing to show that the Hebrew system is either original or ancient—then it leaves the Greek system still to be explained independently. This independence of the two systems (except as regards the method) seems the more likely from the fact that the Hebrew, having no ‘supplementary’ letters after T, ended its

⁴¹ In criticism of Gundermann's (worthless) *Die Zahlzeichen in Ephemeris für Semit. Epigraph.* p. 106.

numeration system with that number, and made up the deficiency as regards 500, 600, 700, 800, and 900 in another way.

At present the only facts established seem to point to a date as early as the ninth century B.C. for the invention of the Greek system, and of the Hebrew system five or six centuries later. But rival theories exist which bring the former much lower down, and there is nothing against the assumption that the Hebrew system was used somewhat earlier, so that all the dates may possibly converge upon the latter part of the fifth century B.C. shortly before the time when Athens adopted the Milesian alphabet. It was a time of great activity of intercourse among the Greeks, Semites, and Egyptian races.

Believing in the possibility of a common origin, in time at least, for the Hebrew and the Greek alphabetic numeration systems, I have tried to find anything that might be offered as proof, but have found nothing, so far.

Why is π called Sampi?

The result of some further search is that I have nothing to add to my remarks in my 'Sematography of Greek Papyri,' *J.H.S.* xxii. (1902) pp. 144, 145; and above, pp. 338-9.

In addition to the improbability of any real relation of π either with San or with Pi, there is the obvious objection that the name Sampi is very late, 'in the second half of the seventeenth century,' says Keil (*Hermes*, 29, p. 267). One may, without fear of contradiction, make the simple statement that it is a fanciful explanation, showing a little superficial acquaintance with Greek letter-forms, though San had passed out of existence centuries before π appeared, and with π either as letter or as numeral the symbol could never have had anything to do.

What evidence is there of the passing of τ into π ?

The question is asked here simply to supply the last of the links in the long chain, which we have thus examined one by one, but I do not think it profitable to make laborious proof of that which everybody knows. One point, however, is worth note, *viz.* that instances of π , with two legs, can be found earlier than the ninth century, the date usually given in the text-books. It certainly occurs on earlier ostraka (See Viereck on 'Die Ostraka des Berliner Museums' in *Arch. für Papyrusch* I. iii./iv. 1901, p. 453 *sqq.*) as π side by side with τ and \uparrow .

* * * *

My own conclusion from the sum of the arguments is that the Ionic alphabet has been shown, not yet by rigid demonstration but by reliable deduction, to be Semitic in origin, and related with Phoenician, either by

direct derivation or as cognate; and that sufficient proof has been forthcoming of some distant relation between these Semitic alphabet-forms and those of the Egyptian alphabets, though affinity between the *languages* is improbable. These Semitic elements of the Ionic alphabet were then extended by the arbitrary additions of Υ Φ Χ Ψ Ω, hardly earlier than the seventh century B.C., to complete the representation of spoken Greek; and this completed alphabet was applied to numeration in the sixth century B.C., as a spontaneous invention in Ionian Miletus, or a neighbouring town, perhaps Halicarnassus. Either at this time, or at some time before the Ptolemaic papyrus period, another arbitrarily selected sign was added, to represent 900; but whether this was an adaptation of one of the other Greek letters (possibly ϣ = 90), or was the rare sibilant Τ appearing independently in the same vicinity, the evidence is not yet sufficient to decide; these two, however, are the only probable alternatives. Then, I think, about the fourth century B.C. the Hebrew alphabet was similarly applied, in Hebrew writing, for numeration, but without any borrowings of extraneous forms or direct copying of the Greek system in details—the principle was accepted as an improvement on the old ‘Phoenician’ method, just as it was accepted in the Greek world as an improvement on the earlier acrophonic.

Further, I think that the evidence goes to show that the letter which corresponds to the Semitic ט (Tsade) is the Greek Μ, and not Τ, though this may at some future time be found to be a *cognate* descendant from a different Semitic stem. It follows as a corollary from these conclusions that Tsade, as generally known to us, is not the same as Τ or ϯ found for 900 on papyri; and that ϯ is quite as probably the normal, as that it is a rounded form of Τ. Lastly ϯ=900 is the same as the minuscule ϱ and the later ‘Sampi’ Ϟ.

This and no more is in my opinion to be deduced from the existing data.

F. W. G. FOAT.

NOTE.—As this article is being passed for press, Prof. E. A. Gardner calls my attention to the use of Τ=900 in an inscription of the second century B.C. from Magnesia (Kern, *Inscr. von Magn.* 100; Ditt. *Syll.*² ii. 552, l. 83). This is apparently the earliest lapidary instance.

NOTICES OF BOOKS.

The Myths of Plato. Translated with Introductory and other observations by J. A. STEWART, White's Professor of Moral Philosophy in the University of Oxford. Pp. xii+532. London: Macmillan & Co., 1905.

The principle which lies at the root of Prof. Stewart's philosophy, and which animates his exposition of Plato's thought in the present volume, is the conviction that there is a truth higher than the truths attainable by science and reason, and cognisable by a higher faculty, which he calls Transcendental Feeling. This Transcendental Feeling is defined as 'at once the solemn sense of Timeless Being—of "That which was, and is, and ever shall be" overshadowing us—and the conviction that Life is good'; and 'in Transcendental Feeling, manifested normally as Faith in the Value of Life, and ecstatically as sense of Timeless Being, and not in Thought proceeding by way of speculative construction, that Consciousness comes nearest to the object of Metaphysics, Ultimate Reality.' Thus Poetry, which is the embodiment of Transcendental Feeling, gives us from time to time glimpses of a truth which we feel to be higher and truer than any of the 'facts' of which science can assure us. In Plato these higher glimpses are embodied in the Myths, which consequently contain the kernel of the Platonic philosophy. As Kant's Ideas of Reason represent aspirations and ideals which cannot be made the objects of speculative science, but a faith in which is essential to the regulation of our conduct, so Plato's myths regulate Transcendental Feeling for the service of conduct by representing certain faiths or pre-suppositions which are inseparable from intelligent human life, and associating them with the constitution of the Cosmos.

In pursuance of this belief, which is most lucidly set forth in the Introduction and illustrated by copious quotations from poetry and folklore, Prof. Stewart gives a text and translation of all the Platonic Myths (the 'Timæus' is abbreviated and the 'Critias' only summarised), with comments on the principal thoughts suggested by them. His main thesis will be accepted or rejected according as the reader's taste leans towards Philosophy or Poetry; but few can fail to appreciate the thoughtful, poetic, outlook upon existence which his book reveals, or the fine sense of great literature—especially Dante—with which it is illustrated. It is an original, individual, unconventional work, which will be read with pleasure by scholars and philosophers in this country.

Thukydides. Erklärt von J. CLASSEN, Bd. vi. (bk. vi.): dritte Auflage, bearbeitet von J. STEUP. [*Sammlung griechischer und lateinischer Schriftsteller, mit deutschen Anmerkungen.*] Pp. iv+295. 2 maps. Berlin: Weidmann, 1905. 3 m.

This new volume of the new edition of Classen's well-known work does not need more notice than is required to call attention to its existence. Not much use is made of such new material as has appeared since Classen's time. Hude's edition is mentioned, but not approved; that of Stuart Jones does not seem to be mentioned; in the episode of the

Pisistratidae the evidence of the Ἀθηναίων Πολιτεία is mentioned only to be rejected wherever it differs from Thucydides. Two small maps, of Sicily and the siege of Syracuse, are prefixed. English schoolmasters might well make use of the book for comparison with (but not necessarily in substitution for) the editions published in this country.

The Flinders Petrie Papyri. With Transcriptions, Commentaries, and Index. [Part III.] By the Rev. J. P. MAHAFFY, D.D., and Prof. J. GILBERT SMYLY (Royal Irish Academy, Cunningham Memoirs, No. xi., Dublin, 1905). Pp. xx+389. Seven autotypes. £2 2s. net.

The third part of the *Flinders Petrie Papyri* is the result of many years' toil on the part of Prof. Smyly in revising the texts originally edited by Prof. Mahaffy, and in working over the mass of fragments which the latter had left untouched. In this way the old texts have been improved and sometimes enlarged, and many new documents have been added to them. The fragment on the Third Syrian War of Ptolemy III is shown to be probably a proclamation or narrative issued by the king himself; otherwise no literary or quasi-literary text appears in this volume. On the other hand there is a great quantity of legal, official, and business documents, and a good deal of light is thrown on the administration of Egypt, and especially of the military colony settled in the Fayum, in the third century B.C. The form of publication is cumbrous, especially for so stout a volume as this, and for practical purposes it would have been more convenient to have had all the texts, old and new, printed in full in a less luxurious style, instead of having long series of corrected readings of the earlier parts; but no doubt the possibility of using the generous financial aid of the Royal Irish Academy if it appeared as a 'Cunningham Memoir' was a decisive consideration. Dr. Mahaffy contributes an introductory paper, which is devoted to a damaging reply to Prof. Revillout's criticisms.

C. Plinius Secundus, Nat. Hist. II. 242—VI. Edited by D. DETLEFSEN [*Quellen und Forschungen zur alten Geschichte und Geographie*, Heft. 9]. Pp. xvii+282. Berlin: Weidmann, 1904. 8 m.

This is a critical edition, with apparatus on a large scale, of that part of the *Naturalis Historia* which relates to geography. Prof. Detlefsen has collected critical materials for the whole of the work, to a much larger extent than could be utilised in the edition issued by him in 1866-73; and as he sees no possibility of the publication of a complete *editio maior*, he takes advantage of the *Quellen und Forschungen* series to publish a portion of the text with the full apparatus at his command. The conclusions with regard to the textual criticism of Pliny derivable from this section of the work will naturally be of value for the study of the whole. Systematic use has been made of the excerpts from the *Nat. Hist.* incorporated in Solinus, Martianus Capella, Bede, and the treatise *de mensura orbis* of the Irishman Dicuil.

History of Ancient Pottery, Greek, Etruscan, and Roman. By H. B. WALTERS. Based on the work of SAMUEL BIRCH. 2 vols. Pp. xxxvi+504, xiv+588. With 300 illustrations, including 8 coloured plates. London: MURRAY, 1905. 8vo. £3 3s.

The basis on which this important book is constructed had become so much damaged by time, that it was necessary practically to rebuild it from the foundations. It is true that not very much has been added to the first quarter of the book, dealing with introductory and technical matters. But, for the rest, the work must be regarded as an independent

production. It might not, indeed, have been undertaken on so extensive a scale had not Birch's book already existed; but otherwise there is little left of the original save certain traces—occasionally quaint enough—perceptible in style or method. The author has wisely drawn the limits of his subject somewhat narrower, omitting the pottery of the East and of the Northern barbarians. He has thus obtained space for the sections which bulk more largely in the new than in the old book. This is notably the case with the art of vase painting, its history and treatment of subjects; it is in this, of course, that most advance has been made of late. And we now have an admirable summary of recent research in the history and classification of Roman terracotta-work and pottery. This section (nearly a quarter of the book) will make it necessary to every student of Romano-British antiquities. Perhaps the whole work would have gained in some ways had the author boldly cut out of his scheme the whole of such Greek and Roman terracotta-work as is not pottery, strictly speaking. This would have left room for the fuller treatment of two points which we may notice. The earliest pottery from Greek sites, especially those recently excavated, is not, we think, accorded the space which it deserves. In particular, of the extraordinary richness and artistic value of the ceramic remains from Crete little idea can be gathered from the brief section devoted to them. The author may, however, plead an excuse: although these remains, in bulk and beauty, must rank before those produced by any other prehistoric site, we cannot yet be sure of having found the right perspective in which to view them. Better, therefore, not to risk putting on record, in a general handbook, an erroneous theory as to the place of these antiquities in the history of pottery. Secondly, the author has hardly attempted to deal with Greek vases from the aesthetic point of view, either as regards their place in art generally, or in relation to other schools of decorative pottery. Yet this, outside the archaeologist's study, is surely the one important thing about Greek vase-forms and vase-painting. These deficiencies are, however, mere specks on a fine piece of work, which has entailed an enormous amount of labour gladly bestowed, and will be gratefully appreciated by every student and teacher. A good bibliography and index accompany the volumes, and the illustrations are as good as can be obtained by means of half-tone and line-blocks.

Douris et les Peintres de Vases Grecs [Les Grands Artistes]. PAR EDMOND POTTIER. Paris: LIBRAIRIE RENOUD. Pp. 128. 25 illustrations. [1905.]

M. Pottier's contribution to the French series of "Great Artists" is a model for those who attempt to popularise archaeology. Its aim is to show how a better idea of the spirit of Greek painting may be gained from a study of a single vase-painter's work than from any amount of literary description or later monuments, although the vase-painter does not necessarily reflect any individual painter's genius. He selects Douris on account of the number of his vases preserved, all of which we know that he actually painted himself.

Introductory sections deal with the social condition of Athenian vase-painters, the conditions under which they worked, and their technical equipment. Then the vases of Douris are discussed in detail, according to the different classes of subjects depicted, followed by an artistic estimate of his work. There is a useful bibliography, and the photographic illustrations are uniformly excellent.

Les Monnaies Antiques de l'Italie. Tome I. Fasc. iv. (Les Samnites-Campaniens.) By A. SAMBON. Pp. 56 With 29 cuts in the text and a photographic plate. Paris: Bureaux du 'Musée'. 1905. 5 f.

The present instalment of this meritorious work is considerably shorter than any of its predecessors. The series with which it deals are, however, exceptionally interesting, more particularly those of Hyria and Phistelia. The author does not startle us with any novel

theories. But his statements of fact are careful, and his own judgment, when there is need to exercise it, is sober and cautious. Is it hopeless to appeal once more for additional photographic illustrations?

A Grammar of Greek Art. By PERCY GARDNER. Pp. xii+267. 87 illustrations. London and New York: MACMILLAN and MACMILLAN Co., 1905. 7s. 6d.

This is an attempt to explain 'what are the main principles of Greek art and what are its relations to literature,' intended 'principally for men of classical training, and particularly for classical teachers in schools.' It contains chapters on the General Character of Greek Art; Ancient Critics on Art; Architecture; Sculpture; Vases; Literature and Painting; the Life History of a Myth, and similar subjects. There is probably no other book which fulfils the purpose in the same way with so much lucidity and directness, yet breadth of handling. It does not give to any great extent the sort of information which is found in textbooks of archaeology; rather it seeks to clothe such dead bones with something approaching to significant life. It is a genial protest against the unintelligent use of second-hand archaeology by teachers, conched in the form of a guide to the understanding of archaeological data, and of an incitement to training, as apart from mere book-knowledge. Not only teachers, but specialists will find it worth studying; for it serves to correct the mistaken perspective which every specialist is liable to adopt, and the author's remarks are always thoughtful and, backed by experience, often illuminating.

Oriens Graeci Inscriptiones Selectae. Supplementum Sylloges Inscriptionum Graecarum. Edidit W. DITTENBERGER. Vol. II. Pp. vii+750. Leipzig: HIRZEL, 1905.

The first volume of this remarkable work was published in 1903; the second and concluding volume is already before us. We have in it 289 inscriptions relating to the various Eastern provinces of the Roman Empire. An Appendix gives 50 important inscriptions discovered since the collection was first put into shape. These are not so exciting, except to specialists in Hellenistic history, as the brilliant procession which finished up the second edition of the *Sylloge*. But among them are some which have hitherto been printed not at all or only in part: 762 [from Cibra: alliance with Rome, probably soon after 188 B.C.], 763 [from Miletus: letter of Eumenes II to the Ionian *κοινόν*], 765 [from Priene: honours to Sotas for services against the Galatae in the famous invasion]. Then follow addenda and corrigenda, and the invaluable series of indices which we expect and get from this editor: among them an index of the places from which the inscriptions come. The book as a whole is absolutely indispensable to the historical student, whether or not he has access to the innumerable and unwieldy publications from which the inscriptions are collected; for nowhere else will he find a commentary to compare with this for sobriety of judgment and critical acumen.

The Progress of Hellenism in Alexander's Empire. By J. P. MAHAFFY. Pp. vi+154. London: T. FISHER UNWIN, 1905.

This is the publication in book form of a course of lectures delivered by Dr. Mahaffy in the summer of 1904 at the University of Chicago. The treatment of the subject is to a great extent popular in character, but Dr. Mahaffy is so thoroughly at home with all that relates to this period of history that the result is instructive even for the specialist. The opening chapter seeks to show that Xenophon is to be regarded as the precursor of Hellenism.

This view is doubtless true in so far as Xenophon, who for a Greek was a much-travelled man, had imbibed many influences foreign to Greece proper. Other chapters deal with Hellenism in Macedonia, Egypt and Syria, and the final chapter estimates the influence of Hellenism upon Christianity. Dr. Mahaffy's enthusiasm occasionally leads him to exaggerate the merits of Hellenism, *e.g.* in art. Fine as they are, the Nike of Samothrace and the Aphrodite of Melos are not without features which point to a period of decline. The style of the lectures is, as we should expect, refreshingly vigorous, and the trenchant allusions to modern political and social questions add piquancy to a work which should go far to convert any who still cling to the belief that Greek History ends with Chaeroneia.

De Graecorum Medicis Publicis. Scripsit R. POHL. Pp. 86. Berlin: Reimer, 1905.

This dissertation contains a full and conscientious discussion of practically all that is known and has been conjectured about public physicians in Greece from the earliest down to Roman times. It is, of course, often difficult to decide whether certain physicians mentioned in history actually held public office; an instance worth considering is the *ἄκρος ἱερός* Aeron of Agrigentum. Among other things, the author points out the original distinction and ultimate coalescence of the true medical art and the art of the priests of Asklepios. He discusses fully the evidence of inscriptions and papyri, and even the solitary instance of an *ἀρχιαισχύς* named on a Greek coin (Statilius Attalus of Heraclea Salbuce) has not escaped him.

* * * *For other books received, see List of Accessions to the Library.*

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